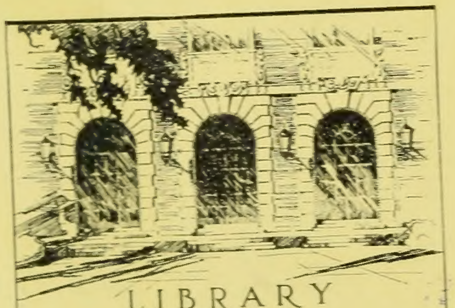

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

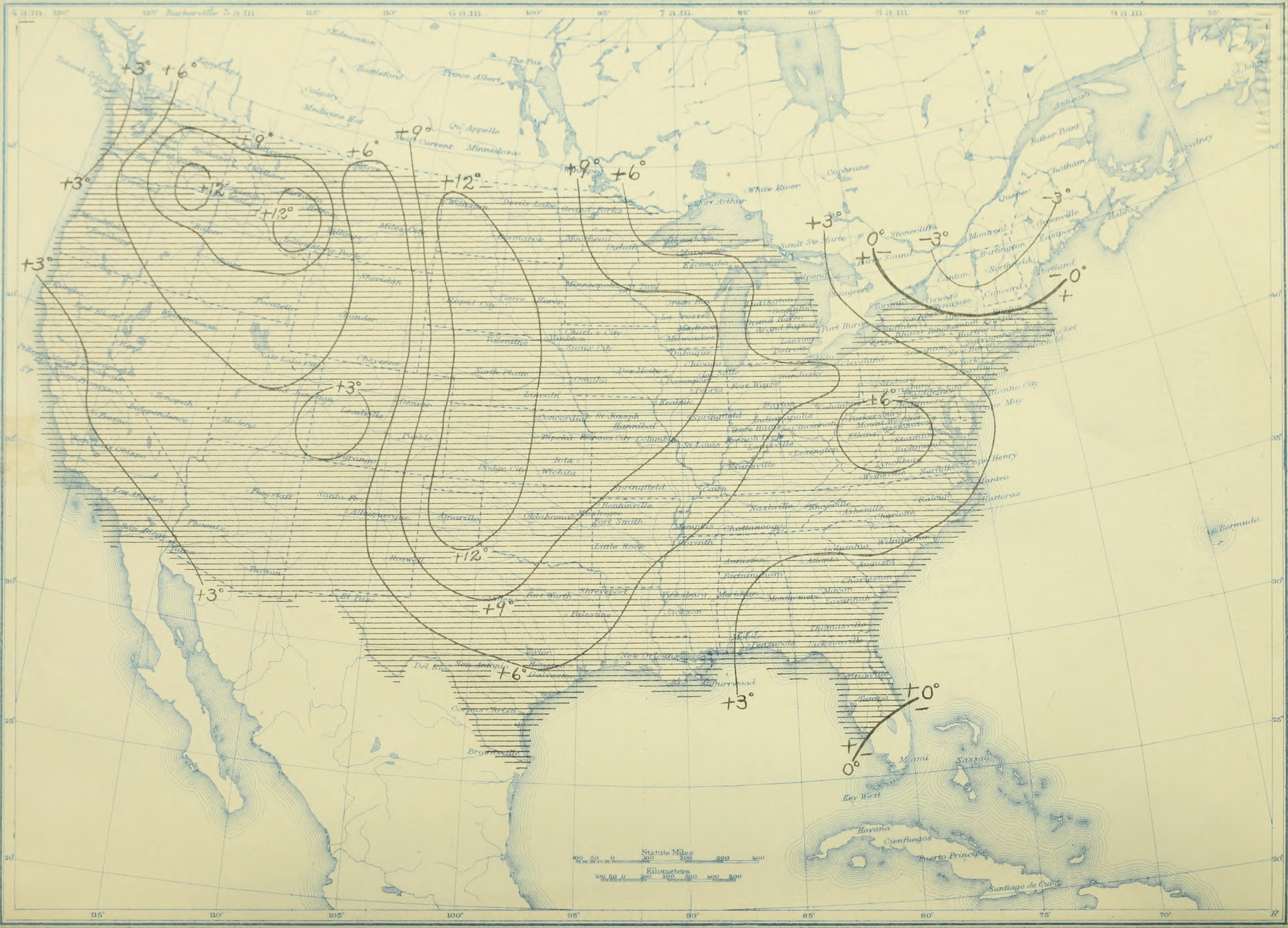
KENTUCKY SECTION

JANUARY, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 20, 1914.

Departure of the Mean Temperature from the Normal, January, 1914.



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1914-20

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

Vol. XIX. Louisville, Ky., January, 1914. No. 1

GENERAL SUMMARY.

The mild weather of December, 1913, continued during January, the month being remarkable for equable temperature and the absence of severe wintry conditions. Maximum temperatures in the 60's were general in the periods 20th-23d and 27th-29th and temperatures above 70° were registered at several stations on the 29th. Minimum temperatures were also high except during the period 11th-14th, and on a large number of days were above freezing.

Precipitation was deficient over the entire State. It was heaviest over the east-central and south-central counties where amounts ranged from 2.5 to 3.6 inches, and lightest over the western part of the State and the counties bordering on the Ohio River where amounts were generally between 1.5 and 2.5 inches. Most of it occurred in the periods 2d-5th, 24th-25th and 30th-31st. The heaviest rainfalls occurred on the 30th-31st when 24-hour amounts exceeding 1 inch fell at a large number of stations and 2 inches or more at a few.

Snowfall was light, averaging only 1.1 inch for the State, and nearly all of it occurred in the period 2d-5th. There were no damaging storms.

PRESSURE.

The mean sea-level atmospheric pressure at Louisville was 30.03 inches and at Lexington, 30.01 inches. At Louisville the highest was 30.52 inches on the 12th and the lowest 29.38 inches on the 9th. At Lexington the highest was 30.47 inches on the 13th and the lowest 29.40 inches on the 9th.

TEMPERATURE.

The monthly mean for the State, 36 stations reporting, was 39.4°, the daily excess above the 25-year normal being 4°. The highest mean for the month was 43.7° at Alpha and the lowest 36.4° at Beattyville.

The highest temperature was 79° at Weeksbury, Floyd County, on the 29th, and the lowest 5° at Farmers on the 13th, giving a monthly range for the State of 74°.

HUMIDITY.

At Louisville, the average humidity at 7 a. m. was 78° per cent. and at 7 p. m. 73 per cent.

PRECIPITATION.

The average for the State, 46 stations reporting, was 2.31 inches, which is 1.91 inches below the normal for January for 25 years. The greatest amount for the month was 3.61 inches at Burnside, and the least 1.01 at inches at Shelbyville. The greatest amount in 24 hours was 2.14 inches at Burnside on the 31st. The greatest monthly snowfall was 4.5 inches at Alpha. The average number of days with .01 inch or more precipitation was 6.

WIND.

The average wind velocity at Louisville was 15.6 miles per hour and at Lexington 13.6 miles per hour. The total movement was 11596 miles at Louisville and 10086 miles at Lexington. This was the greatest wind movement on record for any month at Louisville. The maximum velocity for 5 minutes was 48 miles at Louisville and 44 miles at Lexington, from the southwest on the 31st. High winds were reported from several stations on the 27th, 29th and 31st, but there was no damage.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine was 46 at Louisville and 32 at Lexington. The average number of clear days for the State was 9, partly cloudy 7 and cloudy 15.

MISCELLANEOUS PHENOMENA.

Sleet was reported at various stations in the western and northern parts of the State on the 2d, 18th, 30th and 31st. Lunar halos were observed on the 8th, 10th, 15th and 16th. The rivers were at moderate stages throughout the month.

Comparative data for January.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	38.0	+2.6	65	13	3.52	−0.70
1890	44.0	+8.6	77	10	6.43	+2.21
1891	37.0	+1.6	68	14	5.40	+1.18
1892	29.0	−6.4	65	− 6	2.72	−1.50
1893	26.0	−9.4	67	−22	2.08	−2.14
1894	38.0	+2.6	78	−12	2.91	−1.31
1895	30.0	−5.4	78	−16	5.71	+1.49
1896	36.1	+0.7	74	− 3	1.25	−2.97
1897	32.0	−3.4	75	−16	3.25	−0.97
1898	40.4	+5.0	72	6	8.76	+4.54
1899	34.4	−1.0	68	−18	6.23	+2.01
1900	37.2	+1.8	77	− 8	2.80	−1.42
1901	36.7	+1.3	75	4	1.85	−2.37
1902	33.7	−1.7	70	5	5.14	+0.92
1903	34.8	−0.6	82	− 9	2.50	−1.72
1904	32.3	−3.1	70	− 9	3.17	−1.05
1905	27.5	−7.9	70	−15	2.83	−1.39
1906	39.7	+4.3	80	− 9	3.48	−0.74
1907	43.2	+7.8	83	−11	8.02	+3.80
1908	35.0	−0.4	62	7	2.20	−2.02
1909	38.3	+2.9	77	− 8	3.47	−0.75
1910	33.8	−1.6	70	−20	4.41	+0.19
1911	39.7	+4.3	73	−16	2.88	−1.34
1912	25.9	−9.5	61	−20	3.09	−1.13
1913	42.5	+7.1	76	13	11.41	+7.19
1914	39.4	+4.0	79	5	2.31	−1.91

NOV 4
DING DEPT.

Climatological data for January 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	40.2b	+ 5.4	70c	29	14b	13	31d	1.61	− 2.83	0.60	T.	4	8c	7c	13c	S	W. T. Austin.
Blandville	Ballard	445	32	41.3	+ 7.9	71	29	15	13	37	1.97	− 2.44	0.71	0.2	8	9	6	16	NW	E. W. Horr.
Calhoun	McLean	397	11	42.0a	+ 5.1	71a	29	14a	13	38a	2.26	− 2.64	1.39	0.1	9	2	15	14	NW	W. A. Taylor.
Earlington	Hopkins	370	24	40.9	+ 5.3	72	29	13	13	41	2.31	− 1.82	1.20	T.	6	11	5	15	N	Brick Southworth.
Hopkinsville	Christian	524	18	42.0	+ 4.1	70	27	15	13	46	2.15	− 2.29	1.00	0.5	5		5	17	S	W. F. Randle.
Owensboro	Daviess	479	17	39.2	+ 3.5	70	29	17	13	33	1.60	− 2.39	1.02	0.5	7	5	6	20	NW	Henry S. Berry.
Paducah	McCracken	341	25	......	......	......	......	......	......	....	1.52	− 2.74	0.60	....	5	....	....	....	......	S. A. Fowler.
Central Section.																				
Alpha	Clinton	......	20	43.7	+ 3.4	72	28	14	13	34	3.45	− 1.40	1.90	4.5	5	14	2	15	N	W. W. Hicks.
Anchorage	Jefferson	700	13	37.6	+ 4.1	70	28	10	13	28	2.21	− 1.15	0.90	3.0	6	14	14	3	SW	C. E. Barrett.
Bardstown	Nelson	637	17	38.6	+ 1.0	70	28	11	13	39	2.71	− 1.56	2.00	1.2	6	9	9	13	SE	Thos. S. Talbott.
Bowling Green	Warren	500	25	39.5	+ 2.5	70	28	11	13	40	1.92	− 2.59	0.95	0.5	9	14	5	12	N	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	....	3.61	− 0.14	2.14	0.2	9	....	....	....	......	K. W. Massey.
Cloverport	Breckenridge	......	0	......	......	......	......	......	......	....	1.61	......	1.02	0.3	8	....	....	....	......	J. B. Randall.
Edmonton	Metcalfe	600	23	40.4	+ 4.5	69	28	12	13	35	2.60	− 1.45	1.50	1.1	7	11	8	12	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	39.4a	+ 4.5	70a	28†	9a	13	39b	2.62	− 1.05	1.64	0.5	5	5	5	21	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	39.2	+ 3.0	68	28	12	13	35	1.68	− 1.94	1.00	0.4	5	9	2	20	NW	Mrs. M. J. Roberts.
Franklin	Simpson	691	20	41.5	+ 3.9	69	28†	14	13	36	2.00	− 1.60	1.06	T.	4	0	21	10	NW	J. E. Newman.
Greensburg	Green	581	22	39.2	+ 5.0	69	29	12	13	40	2.65	− 1.38	1.50	T.	7	4	6	21	SE	Mrs. Bettie H. K. Alcorn.
High Bridge	Jessamine	762	11	......	......	......	......	......	......	....	2.53	− 0.79	1.60	T.	7	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	......	16	40.1	+ 4.7	68	29	15	13	26	1.43	− 2.26	0.70	T.	5	12	2	17	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	39.4	+ 4.6	68	28	12	13	34	1.41	− 2.91	0.74	1.2	5	8	9	14	S	John E. Stone.
Lexington	Fayette	989	26	37.2	+ 4.2	66	28	13	13	26	2.50	− 1.33	1.57	1.4	6	7	8	16	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	39.8	+ 3.6	68	28†	7	13	36	2.81	− 1.28	1.02	0.5	12	12	4	15	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	39.0	+ 4.7	69	28	16	13	30	1.84	− 2.06	1.13	0.7	6	4	11	16	S	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	......	4	40.1	......	68	28†	13	13	34	2.19	......	1.16	2.0	4	9	7	15	SW	Wm. I. Hunt.
St. John	Hardin	777	18	37.7	+ 3.5	68	28	10	13	41	1.48	− 2.80	1.05	T.	3	3	6	22	......	Sisters of Loretto.
Scott	Kenton	......	16	37.2	+ 5.1	67	28†	10	13	37	2.30	− 1.18	1.34	2.9	8	8	5	18	S	E. B. Wilson.
Shelby City	Boyle	1087	20	40.0d	+ 5.4	70	28	10g	13	31g	3.02	− 1.40	0.97	1.2	6	13	3	15	SW	H. F. Ewing.
Shelbyville	Shelby	759	25	37.0	+ 3.3	66	28	19	12	25	1.01	− 2.96	0.61	....	5	11	12	8	S	C. R. Burnett.
Taylorville	Spencer	489	12	38.8	+ 5.0	67	28	11	13	31	2.72	− 0.95	1.13	1.0	7	7	9	15	S	E. D. Bourne.
Williamstown	Grant	943	11	37.0	+ 5.4	68	28	10	13	35	1.60	− 1.49	0.90	1.0	5	11	5	15	......	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	36.4	+ 1.9	76	28	6	13	44	3.37	− 0.64	1.48	4.0	9	6	12	13	W	G. W. Cann.
Berea	Madison	1070	13	41.2	+ 4.2	76	29	9	13	31	3.08	− 0.76	0.77	2.0	9	12	5	14	SW	C. F. Rumold.
Catlettsburg	Boyd	544	25	......	......	......	......	......	......	....	2.14	− 1.76	0.64	....	10	....	....	....	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	......	......	......	......	......	......	....	2.32	− 0.95	1.44	T.	6	5	6	20	S	J. V. Oldham.
Farmers	Rowan	668	8	39.2d	......	74d	28	5d	13	38d	2.22	......	0.87	0.2	5	14	6	11	W	Lee Craycraft.
Hazard	Perry	......	0	......	......	......	......	......	......	....	2.99	......	1.10	....	8	....	....	....	......	Kelley E. Watts.
Jackson	Breathitt	......	4	......	......	......	......	......	......	....	......	......	......	....	....	....	....	....	......	T. J. Turner.
London	Laurel	......	0	......	......	......	......	......	......	....	......	......	......	....	....	....	....	....	......	C. R. Lee.
Louisa	Lawrence	......	2	......	......	......	......	......	......	....	2.28	......	0.77	....	6	....	....	....	......	Lucien S. Johnson.
Manchester	Clay	......	3	......	......	......	......	......	......	....	2.57	......	0.98	....	6	....	....	....	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	37.3	+ 5.0	74	28	10	13	40	2.02	− 1.93	0.98	T.	5	8	5	18	SW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	41.2	+ 4.1	71	29	14	13	33	2.10	− 1.90	0.58	....	9	18	5	8	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	37.4	+ 3.6	68	28	15	13	36	3.48	− 0.90	1.60	3.0	6	6	11	14	NW	Jas. O'Connell.
Pikeville	Pike	......	6	......	......	......	......	......	......	....	2.10	......	0.50	....	7	....	....	....	......	I. M. Williams.
Richmond	Madison	926	22	39.2	+ 5.5	70	28†	13	13	29	2.77	− 1.30	1.55	....	7	7	5	19	......	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	42.1	......	79	29	17	14	40	2.33	......	0.60	2.0	8	10	9	12	......	O. A. Lund.
Williamsburg	Whitley	939	18	38.4	+ 0.5	76	29	13	13†	41	2.99	− 0.62	1.03	0.6	9	10	5	16	W	N. C. Jones.

All temperature data are taken from self-registering thermometers. Estimated and incomplete data are not considered in means.

All other records are used in determining section means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for January, 1914.

STATIONS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Section.																																	
Beaver Dam	G.				T.	.30																			.31						[illegible]	[illegible]	[illegible]
Blandville	M		.43		....	....														.03	.02				[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	1.97
Calhoun	G		.22	.02	.03	.12	.01												.01	T					.24	....					[illegible]	[illegible]	[illegible]
Earlington	G		.23	.15																					.28	....					[illegible]	[illegible]	[illegible]
Hopkinsville	C		.30	.05																					.40						[illegible]	[illegible]	[illegible]
Owensboro	O		.20	....	.02	.10														T.		T.			.03	.20					.03	[illegible]	1.60
Paducah	O		.30	.10																	T			.50							[illegible]	.60	[illegible]
Central Section.																																	
Alpha	C		.80	.25	.20	T				T.											.30										[illegible]	T	3.45
Anchorage	O		.23	T.	.17	.13													T.						.23						[illegible]	[illegible]	[illegible]
Bardstown	S				.02	.10														.05	T				.13	.41					T	[illegible]	2.71
Bowling Green	G	.05	.02	.28	.05	.10																			.28	.05					.11	[illegible]	[illegible]
Burnside	C	.05		.27	T.	.12	.01				T									.03		.28			T.	.60					[illegible]	[illegible]	3.61
Cloverport	O.		.07	.20	.03	.03															.02				.22	.02					....	1.02	[illegible]
Edmonton	G.		.26	.11	.10																.10				.53	....					.70	[illegible]	[illegible]
Eubank	C.			.28	.06	.04																				.60						1.64	[illegible]
Frankfort	K			.10	.09	.09														T.	T.				T.	.40					T	[illegible]	1.68
Franklin	G		.25	T	T.														T.	T.					.56						[illegible]	1.06	[illegible]
Greensburg	G.			.33	.10	T.														.05					.17	.30					.20	1.50	2.65
High Bridge	K.			.14	.05	.08	T.																		.12	.45					[illegible]	[illegible]	2.53
Irvington	O.		.13	.10		.09													T.	T.		T.			.41						T.	.70	1.43
Leitchfield	G.		.20	.07																					.10						*	.71	1.41
Lexington	K.	T.	.19	.04	.06	T.	T.			T		T.								T.	T.	T.	T.		.62						1.01	[illegible]	[illegible]
Loretto	S		.13	.02	T.	.05					.01			T.	.01				.03	.02	T.		T.		.70	.01	.01				.80	1.02	2.81
Louisville	O		.10	T.	.10	T.						T							.01	T.	T.	T		T.	.50					T.	.60	[illegible]	[illegible]
Do (Cherokee Park)	O.			.30		.26													T.						.47							1.16	2.19
St. John	S.		T.	T.	T.	T.														T.					.20	.23	T.				T.	[illegible]	[illegible]
Scott	L.		.02	.10	.16	.08						T.								T.	T.	T.	.01		.43						.16	1.34	[illegible]
Shelby City	K.		.30	.05		.12															T.				.72						.86	.97	[illegible]
Shelbyville	S.			.10	.22	.03														T.	T.				.61						.05	....	1.01
Taylorsville	S.	T.	.10	.03	.02	.09														T.		T.			.58	T.					.77	1.13	[illegible]
Williamstown ‖	L.			.12	.03	.04																				.51						.90	[illegible]
Eastern Section.																																	
Beattyville	K			.36	.16	.10	.06						T.							.10		.05				.84					.22	[illegible]	[illegible]
Berea	K.	.11	.33	.16	.24	.16	T.			T.											T.	T.			.77	.12		.02			.45	.72	[illegible]
Catlettsburg	B	.10		.22	.34	.12	.02					T.	T.						T.			.12	T.		.02	.52					[illegible]	[illegible]	2.14
Falmouth	L.			.14	.12	.04																			.08	.50						1.44	[illegible]
Farmers	L.	T.		.20	.10																				.87						.20	.85	2.22
Hazard	K.	.15		.30	.12	.17	T.															.49				.32					.34	1.10	2.99
Jackson	K.																																
London	C																																
Louisa	B.			.40	.20																	.23				.60					.08	.77	2.28
Manchester	K			.03			.05															.49				.54					.48	.98	2.57
Maysville	O.	*		.11	.13	.05						T.	T.												T.	.75						[illegible]	2.02
Middlesboro	C.		.13	.22	.24	.08														.04					.58	.20					.26	.35	2.10
Mount Sterling	L.	T.		.25	.30	.28	.20														T.	T.	T.			1.60						.85	3.48
Pikeville	B.	.20		.50	.20	.10														T.		T.				.40					.20	.50	2.10
Richmond	K.			.38	.04	.04	T.													T.		.03			.15	.58					T.	1.55	2.77
Weeksbury	B.			.40	.20		.03															.30			.30	.20					.30	.60	[illegible]
Williamsburg	C.	.05		.57	.10	.08														.05		.03			T.	.62					.46	1.03	[illegible]

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

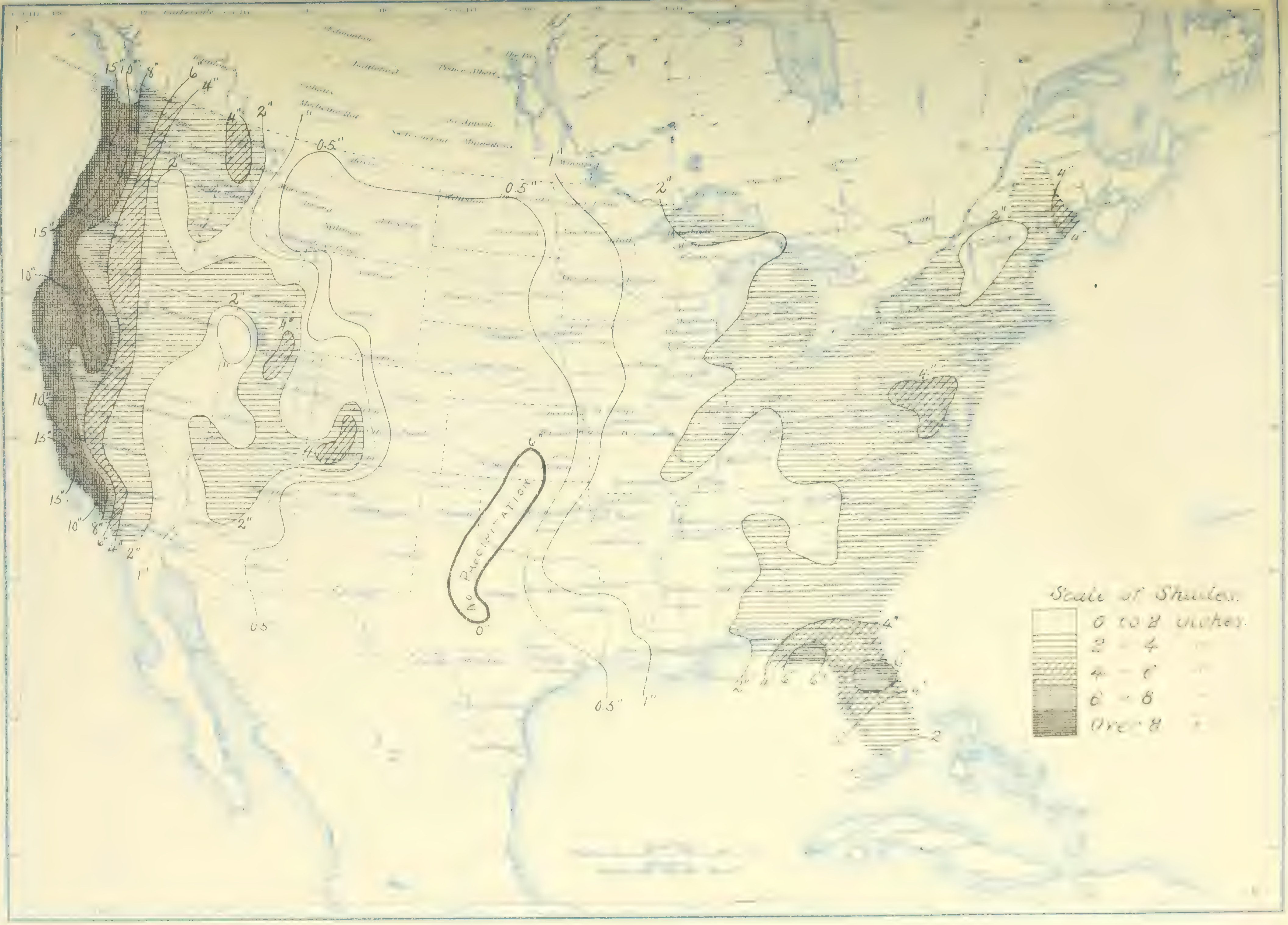
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland, (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for January, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	....		38	34	34	32	44	67	45	42	36	26	41	50	49	....	46	50	58	60	32	57	62	50	46	57	67	69	70	36	39	47.8
	Minimum	32		....	29	31	30	28	36	37	31	22	21	14	20	35	40	32	29	35	35	32	19	32	44	32	33	46	53	55	31	30	32.6
Blandville	Maximum	36	46	36	33	34	38	53	60	54	41	40	35	39	52	59	58	48	47	57	52	42	61	62	56	41	55	66	69	71	34	43	49.0
	Minimum	31	25	31	29	33	30	29	39	33	28	25	23	15	25	34	44	34	34	43	40	30	26	44	37	32	37	53	57	34	28	27	33.6
Calhoun	Maximum	35	38	39	34	34	33	51	62	61	44	38	35	39	53	62	57	52	49	59	....	39	58	61	57	43	58	68	69	71	60	40	50.0
	Minimum	29	34	30	30	32	30	29	41	37	31	23	22	14	23	36	44	32	31	45	....	28	20	48	41	33	34	51	56	59	30	29	34.1
Earlington *	Maximum	38	40	32	34	33	35	53	63	55	45	39	29	41	55	66	57	50	53	61	61	34	50	63	51	43	58	65	71	72	35	41	49.1
	Minimum	30	30	31	30	32	31	30	33	42	31	22	22	13	14	27	37	33	29	36	48	31	20	29	48	34	33	40	58	60	30	30	32.7
Hopkinsville	Maximum	38	41	40	34	34	35	50	63	55	40	40	34	37	53	58	57	51	50	61	65	42	68	63	55	43	60	70	68	69	63	42	50.9
	Minimum	29	33	31	29	31	29	25	35	38	34	23	25	15	19	28	41	31	33	44	41	30	22	44	40	33	33	47	53	53	31	29	33.2
Owensboro *	Maximum	38	39	33	35	33	34	50	58	50	39	34	27	35	51	57	55	42	50	56	53	30	50	61	49	44	56	65	69	70	35	39	46.4
	Minimum	29	30	30	30	32	31	29	34	34	32	23	31	17	22	24	38	34	32	35	40	30	22	30	48	33	34	41	44	57	30	29	32.1
Central Section.																																	
Alpha	Maximum	31	38	37	32	33	32	50	61	58	52	39	35	43	52	59	64	52	41	60	63	60	50	53	52	51	60	67	72	70	59	40	50.5
	Minimum	30	37	30	31	31	30	29	44	52	33	27	29	14	18	41	52	35	30	30	60	32	25	45	51	35	37	53	53	59	40	32	36.9
Anchorage	Maximum	30	36	36	36	32	31	47	56	51	41	30	29	33	45	54	54	45	38	54	61	38	41	63	51	38	56	66	70	68	50	37	45.7
	Minimum	27	29	31	31	29	29	25	35	36	28	21	15	10	19	30	31	26	26	35	36	26	19	39	33	30	28	50	42	41	31	28	29.5
Bardstown *	Maximum	35	38	34	36	33	33	49	58	54	42	33	31	37	46	48	59	47	45	56	64	32	50	62	50	40	59	63	70	69	39	31	46.5
	Minimum	27	28	31	30	30	29	28	30	39	31	24	23	11	13	29	36	33	26	29	45	31	20	23	42	31	34	38	49	51	32	30	30.7
Bowling Green *	Maximum	36	38	33	34	34	34	48	59	56	43	37	23	38	51	49	51	60	50	57	65	59	54	62	50	43	59	66	70	67	60	52	49.6
	Minimum	26	30	28	28	29	22	25	32	44	29	21	22	11	16	17	33	30	27	43	43	28	19	22	46	31	31	34	34	50	31	28	29.4
Edmonton	Maximum	30	37	37	32	33	32	37	39	55	40	30	32	39	52	59	60	52	48	57	65	44	53	60	53	45	60	65	69	68	64	37	48.8
	Minimum	26	26	26	29	30	30	25	32	39	28	23	23	12	17	37	35	32	24	45	43	28	18	44	45	32	32	47	48	55	34	30	32.1
Eubank *	Maximum	33	38	37	32	31	30	40	58	55	41	35	33	37	50	55	60	52	44	58	64	62	48	59	48	....	59	65	70	70	67	58	49.6
	Minimum	25	25	28	29	29	27	27	27	36	30	23	23	9	11	34	34	31	21	27	39	30	19	21	39	32	....	34	47	48	37	30	29.1
Frankfort	Maximum	30	37	37	32	33	32	37	39	55	40	30	32	39	52	59	60	52	48	57	65	44	53	60	53	45	60	65	69	68	64	37	48.8
	Minimum	26	26	26	29	30	30	25	32	39	28	23	23	12	17	37	35	32	24	45	43	28	18	44	45	32	32	47	48	55	34	40	32.1
Franklin	Maximum	36	37	39	35	34	34	48	61	56	49	38	31	40	52	61	60	54	52	58	68	61	56	64	58	44	60	68	69	69	63	53	51.9
	Minimum	26	28	27	27	29	27	24	35	34	28	21	20	14	23	35	41	30	30	43	34	25	21	40	37	32	33	43	48	52	31	27	31.1
Greensburg *	Maximum	35	37	32	34	33	32	54	61	57	40	35	30	38	53	60	61	45	48	59	66	32	57	63	49	41	61	67	68	69	44	36	48.3
	Minimum	28	29	31	31	31	30	29	30	33	32	23	24	12	13	23	33	32	25	27	44	31	18	24	43	34	30	33	47	51	34	31	30.2
Irvington	Maximum	33	38	38	36	37	34	46	59	54	40	32	33	35	49	55	55	45	45	55	57	39	51	60	52	40	55	65	67	68	56	37	47.3
	Minimum	27	30	30	30	30	30	29	39	37	27	22	20	15	25	37	45	30	29	38	32	27	22	42	40	30	35	50	50	56	30	30	32.9
Leitchfield	Maximum	32	37	37	34	33	32	48	58	54	41	33	30	36	50	57	56	49	48	56	63	30	52	61	55	40	56	66	68	66	52	37	47.3
	Minimum	27	29	29	29	30	29	27	35	32	30	21	22	12	19	35	39	31	29	41	30	26	18	41	37	32	30	50	52	52	30	29	31.4
Lexington	Maximum	30	38	34	33	30	30	42	55	52	35	28	31	30	47	50	54	38	38	54	62	36	41	58	50	36	54	64	66	65	46	41	44.1
	Minimum	26	30	29	30	29	27	29	36	34	27	21	15	13	22	34	35	28	24	38	36	25	20	40	33	28	34	47	48	46	30	28	30.4
Loretto	Maximum	30	38	36	35	34	31	48	58	55	39	35	32	37	50	57	58	49	43	56	64	44	50	62	56	42	58	66	68	68	63	40	48.5
	Minimum	28	28	30	29	29	28	27	36	38	30	22	23	7	14	35	35	31	19	38	43	27	19	42	42	32	32	45	51	47	32	29	31.2
Louisville	Maximum	32	38	35	36	33	32	45	56	52	41	31	34	34	48	54	55	44	39	55	59	39	47	61	51	37	56	66	69	67	37	36	45.8
	Minimum	28	30	31	30	29	30	29	39	34	26	22	19	16	23	38	39	32	30	39	37	28	23	47	32	30	36	53	54	37	30	28	32.2
Do. (Cherokee Park)	Maximum	32	37	37	37	35	33	45	55	54	40	38	34	33	48	52	55	52	41	54	61	42	43	63	59	42	55	66	68	68	65	36	47.7
	Minimum	28	30	31	32	30	30	28	36	37	31	23	20	13	21	37	40	34	27	36	42	28	22	36	41	31	32	51	45	54	31	30	32.5
St. John *	Maximum	33	36	32	35	32	31	47	56	53	44	32	29	35	49	58	58	45	46	55	62	30	49	61	54	39	56	64	68	66	37	36	46.1
	Minimum	26	27	30	29	30	29	27	28	39	30	21	21	10	11	23	35	30	28	30	43	30	18	20	35	30	31	34	52	52	30	30	29.3
Scott	Maximum	31	36	33	34	32	31	40	51	49	36	32	27	31	47	52	53	46	37	47	58	41	32	59	55	39	54	65	67	67	62	36	44.5
	Minimum	27	25	30	32	29	28	28	35	35	29	21	15	10	12	33	36	35	22	32	41	25	22	25	37	32	28	46	48	50	30	29	29.9
Shelby City	Maximum	30	39	35	33	34	32	46	57	55	40	33	32	35	49	55	56	51	40	57	65	46	45	59	51	42	57	67	70	68	63	45	48.0
	Minimum						....	....	35	39	30	23	20	10	18	37	30	32	22	37	45	26	20	38	41	31	33	46	48	48	33	29	32.1
Shelbyville *	Maximum	32	33	32	35	33	33	46	55	36	40	26	22	30	40	53	59	38	42	54	60	36	44	58	48	38	53	60	66	56	33	35	42.8
	Minimum	20	26	28	28	30	30	29	30	47	23	22	19	20	20	29	37	34	28	37	39	26	25	40	45	28	34	48	46	47	26	30	31.3
Taylorsville	Maximum	32	38	36	37	33	33	45	55	54	40	34	36	32	49	54	56	48	39	54	63	44	45	51	56	41	56	65	67	66	61	38	46.9
	Minimum	28	30	31	31	30	30	29	33	37	31	23	21	11	18	30	30	31	24	36	41	28	21	36	41	32	31	41	40	42	32	31	30.6
Williamstown *	Maximum	39	37	34	34	32	32	40	53	50	40	32	32	33	48	52	54	34	43	53	61	44	42	61	54	43	55	65	68	61	43	38	45.4
	Minimum	25	26	29	29	28	28	27	35	37	29	20	18	10	13	19	32	34	22	24	41	38	22	24	41	24	26	36	43	48	31	31	28.7
Eastern Section.																																	
Beattyville *	Maximum	33	44	34	34	31	32	43	57	56	40	38	33	39	51	58	60	40	38	55	67	35	47	54	49	41	60	69	76	74	46	36	47.5
	Minimum	28	25	28	27	28	29	28	24	28	30	21	22	6	10	14	22	28	14	24	34	32	17	18	34	30	25	29	33	30	30	32	25.2
Berea	Maximum	30	44	35	33	33	32	43	58	56	56	33	31	34	48	56	59	49	49	56	67	53	50	60	53	42	58	66	73	76	64	46	49.7
	Minimum	26	30	30	30	30	29	29	38	42	30	23	21	9	17	38	36	29	20	39	52	26	21	32	42	38	36	50	53	52	36	30	32.7
Catlettsburg	Maximum	32	40	46	41	38	31	44	56	57	47	35	33	33	50	53	56	....	....	....	....	61	40	63	57	44	58	68	74	72	64	45	49.6
	Minimum	26	28	29	30	29	30	29	26	44	31	23	19	5	12	32	23	....	....	....	....	29	25	25	43	31	28	38	36	38	35	30	28.7
Maysville *	Maximum	34	42	35	36	35	35	46	56	54	36	35	28	33	48	54	58	43	36	53	66	33	43	63	50	38	58	67	74	67	42	38	46.3
	Minimum	25	17	31	31	29	30	29	31	36	31	29	24	10	13	14	28	36	19	23	34	31	25	25	39	27	27	32	42	39	36	34	28.3
Quicksand	Maximum	36	41	36	33	33	33	35	50	52	54	36	37	40	48	56	63	56	44	50	64	48	50	56	53	49	56	63	70	71	67	62	49.7
	Minimum	29	31	31	30	31	31	30	25	43	34	28	19	14	15	37	36	36	20	36	47	21	24	40	41	36	38	39	45	40	53	31	32.7
Mount Sterling *	Maximum	32	38	33	34	36	34	44	53	54	35	31	27	29	35	49	53	40	42	53	63	33	44	60	54	39	54	63	68	66	44	36	44.3
	Minimum	24	27	31	30	31	30	29	30	36	31	28	24	15	18	20	32	34	23	36	42	31	23	24	41	31	30	39	37	49	39	33	30.6
Richmond *	Maximum	34	39	32	33	33	31	44	56	54	36	32	29	35	49	54	57	40	40	55	64	39	47	59	48	50	59	66	70	70	44	34	46.2
	Minimum	26	30	30	29	30	28	29	34	40	31	23	25	13	20	29	37	32	24	35	43	30	20	37	43	31	37	49	49	52	36	30	32.3
[illegible]	Maximum	38	40	40	32	34	33	40	55	63	55	34	33	34	51	52	59	57	56	59	65	63	45	60	53	55	60	65	76	79	70	57	52.0
	Minimum	31	32	27	30	29	28	33	31	41	26	26	22	26	17	34	29	36	21	34	54	31	23	33	40	37	31	36	39	39	45	35	32.1
Williamsburg *	Maximum	36	42	38	33	31	33	44	55	47	42	38	33	32	50	58	64	40	45	62	65	35	54	60	40	49	60	68	72	76	53	46	48.4
	Minimum	28	28	31	30	28	26	29	29	33	30	23	18	13	13	17	27	34	27	30	32	32	19	19	40	31	28	38	32	38	42	34	28.1

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 - 4
4 - 6
6 - 8
Over 8
No PRECIPITATION
0"
0.5"
1"
2"
4"
6"
8"
10"
15"

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CLIMATOLOGICAL DATA

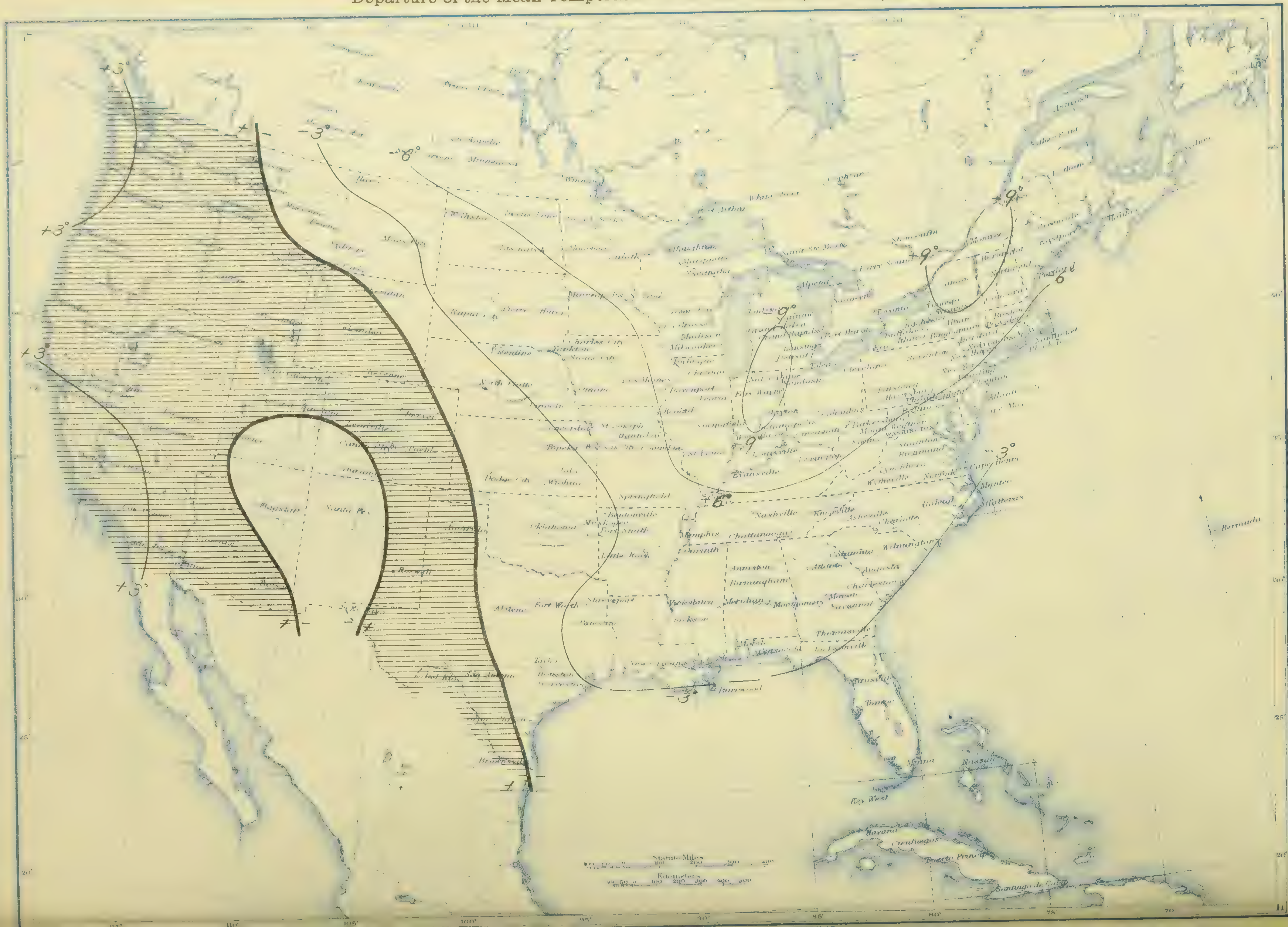
KENTUCKY SECTION

FEBRUARY, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 15, 1914.

Departure of the Mean Temperature from the Normal, February, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

VOL. XIX. LOUISVILLE, KY., FEBRUARY, 1914. No. 2

GENERAL SUMMARY.

Except for the first 6 days which continued the mild weather of January, the month was cold and disagreeable, with frequent storms and several sharp cold waves. Probably the most remarkable feature of the month was the sleet storm of the 22d-23d, which was general over the central and eastern counties, the depth of ice deposited ranging from 0.5 to 3.0 inches. At Louisville sleet fell continuously for 16 1-4 hours. Unusual temperature conditions prevailed over the State during this storm, the difference in temperature between the north and south borders on the morning of the 23d being nearly 40°.

Precipitation was considerably above normal over the northern and western counties, where monthly amounts ranged between 4 and 6 inches. It was near normal over the remainder of the State, except some relatively small areas in the basins of the Green and upper Cumberland Rivers and along the southeast border, where amounts were less than 3 inches. Sleet occurred frequently and in all parts of the State. Snowfall was unusually heavy over the extreme northern counties, greatly impeding traffic and with the accompanying severe cold causing much suffering and some loss among stock in that section. As a whole the month was decidedly unfavorable for outdoor work, which was generally suspended, and for the transportation of perishable goods.

PRESSURE.

Strong, well-developed areas of high and low pressure passed across the central valleys in rapid succession during the month, near enough to dominate the weather conditions over the State. Four of the disturbances ran well to the south, one passing directly over the State, and were the cause of the large amount of snow and sleet that occurred. The mean sea level pressure, computed from two stations, was 30.20 inches. The highest was 30.61 inches on the 24th and the lowest 29.50 inches on the 6th, both at Louisville.

TEMPERATURE.

There were three pronounced cold periods, the 7th-9th, 14th-17th and 23d-26th, the last two with temperatures near zero at many stations and below zero at two, while the minimum temperatures of the first period ranged between 1° and 15°. The lowest temperature for the month occurred at most stations on the 24th, but minima were nearly as low on the 14th and 15th. The highest for the month at most stations in the central and eastern counties was registered on the 6th. After the 6th the weather was generally cold except for a few mild days in the period 17th-22d. The monthly mean for the State, determined from the records of 36 stations, was 32.2, the average daily deficiency being 3.2. The deficiency was greatest in the north central counties, and decreased toward the southern border. The highest mean for the month was 37.9° at Alpha and the lowest 26.2° at Williamstown. The highest temperature for the State was 69° at Franklin on the 6th, and the lowest −2° at Williamstown on the 24th and at Scott on the 25th, making a monthly range for the State of 71°.

HUMIDITY.

At Louisville, the average humidity at 7 a. m. was 80 per cent, and at 7 p. m. 72 per cent.

PRECIPITATION.

Precipitation was largely in the form of snow and sleet and occurred in some part of the State on nearly every day. It was general in the periods 4th-7th, 11th-14th, 19th and 23d-24th. The daily amounts were generally moderate except on the 13th and 19th, when they ranged between 1 and 2 inches in practically all parts of the State. The average for the State, 46 stations reporting, was 4.14 inches, which is 0.4 inch above the normal for February. The greatest amount for the month was 6.50 inches at Cherokee Park, Louisville, Ky., where the greatest 24-hour amount, 2.60 inches, also occurred. The least monthly amount, 2.36 inches, occurred at Pikeville.

Snowfall ranged between 10 and 25.5 inches over the extreme northern counties, but over most of the central and southern counties the amounts ranged between 2 and 6 inches, the average for the State being 7.2 inches. The greatest monthly amount was 25.5 inches at Scott, where the greatest 24-hour snowfall, 8.0 inches, also occurred. Sleet was reported from various stations on the 4th-5th, while the storms of the 13th and 22d-23d were general over the State. There was an average of 11 days with .01 or more precipitation.

WIND.

The average hourly wind velocity at Louisville was 13.9 miles and at Lexington 11.9 miles with a total movement of 9365 miles and 8073 miles, respectively. The maximum velocity for 5 minutes at Louisville was 40 miles from the west and at Lexington 38 miles from the south on the 7th.

SUNSHINE AND CLOUDINESS.

Nothwithstanding the generally stormy character of the month, the percentage of possible sunshine at Louisville was 55 and at Lexington 44, which is not far from the normal for February. The average number of clear days for the State was 10, partly cloudy 5 and cloudy 13.

Comparative data for February.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	34.1	−1.3	74	3	1.91	−1.83
1890	45.6	+10.2	86	16	7.98	+4.24
1891	42.2	+6.8	76	0	4.72	+0.98
1892	42.2	+6.8	70	11	2.92	−0.82
1893	37.7	+2.3	70	3	4.40	+0.66
1894	34.6	−0.8	74	2	4.66	+0.92
1895	25.9	−9.5	80	−18	0.66	−3.08
1896	37.4	+2.0	81	−12	3.06	−0.68
1897	39.8	+4.4	76	8	5.75	+2.01
1898	37.4	+2.0	77	3	1.61	−2.13
1899	26.2	−9.2	71	−33	3.97	+0.23
1900	32.5	−2.9	76	− 9	4.68	+0.94
1901	32.4	−3.0	71	1	1.27	−2.47
1902	27.9	−7.5	69	− 3	1.30	−2.44
1903	37.5	+2.1	75	−16	7.28	+3.54
1904	35.2	−0.2	75	− 2	2.32	−1.42
1905	27.9	−7.5	67	−16	2.44	−1.30
1906	34.7	−0.7	75	−12	1.81	−1.93
1907	35.7	+0.3	73	−10	3.06	−0.68
1908	35.6	+0.2	70	2	5.56	+1.82
1909	42.4	+7.0	75	− 8	8.17	+4.43
1910	32.9	−2.5	66	−12	4.70	+0.96
1911	42.0	+6.6	80	11	3.25	−0.49
1912	29.7	−5.7	68	−14	3.08	−0.66
1913	34.8	−0.6	77	− 2	2.94	−0.80
1914	32.2	−3.2	69	− 2	4.14	+0.40

Climatological data for February 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers
Western Section.																				
Beaver Dam	Ohio	441	11	31.9	− 2.5	63	22	7	24	46	4.94	+ 1.12	1.37	5.5	9	11	4	13	E	W. T. Austin.
Blandville	Ballard	445	32	34.6	− 1.8	63	17	9	24	42	5.01	+ 0.25	1.05	5.0	10	13	4	11	NW	E. W. Horr.
Calhoun	McLean	397	11	34.2	− 2.4	63	22	5	24	46	5.21	+ 1.39	1.93	5.4	12	5	11	12	SW	W. A. Taylor.
Earlington	Hopkins	370	24	32.2	− 4.2	66	22	6	24	49	4.80	+ 0.80	1.87	4.0	8	13	2	13	N	Brick Southworth.
Hopkinsville	Christian	524	18	35.2	− 1.6	65	22	8	14	44	5.02	+ 0.87	1.70	3.2	10	12	1	15	N	W. F. Randle.
Owensboro	Daviess	479	17	30.7	− 3.9	61	22	6	24	27	4.29	+ 0.80	2.25	3.0	10	12	4	12	NW	Henry S. Berry.
Paducah	McCracken	341	25								4.55	+ 0.85	1.80	7.0	9					S. A. Fowler.
Central Section.																				
Alpha	Clinton		20	37.9	− 0.6	65	3	14	8	35	3.86	− 0.64	1.00	13.0	10	9	2	17	W	W. W. Hicks.
Anchorage	Jefferson	700	13	29.4	− 2.8	60	6	− 1	15	36	6.19	+ 2.96	1.68	8.0	7	14	3	11	SW	C. E. Barret.
Bardstown	Nelson	637	17	30.3	− 4.2	59	22	5	24	49	3.94	− 0.22	1.53	10.5	11	11	5	12	SE	Thos. S. Talbott.
Bowling Green	Warren	500	25	33.8	− 3.4	65	22	7	24	54	2.72	1.43	0.75	2.5	8	13	7	8	W	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								2.77	− 1.49	0.88	2.3	12					K. W. Massey.
Cloverport	Breckenridge		0								5.27		2.35	7.3	12					J. B. Randall.
Edmonton	Metcalfe	600	23	35.4	− 1.0	68	6	7	24	47	3.48	− 0.93	1.03	5.5	12	11	4	13	N	Miss Lee Ray.
Eubank	Pulaski	1177	20	34.0	+ 0.7	66	6	6	24†	49	2.85	− 1.24	0.70	0.4	12	8	3	17	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	34.2	0.6	66	6†	4	24	50	4.96	+ 1.40	1.90	8.0	9	10	5	13	S	Mrs. M. J. Roberts.
Franklin	Simpson	691	20	37.4	− 1.2	69	6	10	8†	43	3.46	− 1.43	0.88	1.5	9	4	15	9	NE	J. E. Newman.
Greensburg	Green	581	22	31.7	− 2.0	67	6	6	24	49	3.47	− 0.66	0.62	1.3	13	8	3	17	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11								4.23	+ 0.55	0.97	5.5	11					Miss Lulu Wood.
Irvington	Breckenridge		16	32.0	− 1.8	59	6†	2	24	42	5.67	+ 2.16	1.42	4.2	10	14	0	14	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	32.0	− 1.3	63	6	4	24	50	4.53	+ 0.55	1.37	5.0	11	12	3	13	SW	John E. Stone.
Lexington	Fayette	989	26	29.1	6.5	62	6	2	24	38	3.87	+ 0.64	1.63	5.3	14	11	5	12	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	32.4a	− 1.5	66a	6	3a	24	47a	3.10	− 0.09	1.20	4.6	13	11	1	16		Loretto Academy.
LOUISVILLE	Jefferson	525	42	30.0	− 6.6	59	6	3	24	37	5.77	+ 2.02	2.55	9.9	11	7	6	15	N	U. S. Weather Bureau.
Do (Cherokee Park)	Do.		4	31.0		58	6	2	24	41	6.50		2.60	13.7	12	10	4	14	SW	Wm. I. Hunt.
St. John	Hardin	777	18	29.6	− 3.4	63	6	3	24	44	3.63	− 0.53	1.85	5.0	6	11	2	15		Sisters of Loretto.
Scott	Kenton		16	26.6	− 3.6	58	3	2	25	36	4.97	+ 2.10	1.65	25.5	13	12	4	12	S	E. B. Wilson.
Shelby City	Boyle	1087	20	33.0	− 0.1	63	6	4	24	49	3.11	− 0.52	0.76		9	10	5	13	SW	H. F. Ewing.
Shelbyville	Shelby	759	25	27.8	− 6.2	54	6	2	24	31	5.76	+ 2.16	1.92	9.7	9	7	5	16	W	C. R. Burnett.
Taylorsville	Spencer	489	12	31.0	− 3.2	63	6	4	24	41	5.44	+ 1.32	1.48	6.5	14	9	4	15	SW	E. D. Bourne.
Williamstown	Grant	943	11	26.2	− 4.8	60	6	2	24	44	3.15	− 0.13	0.90	19.1	13	14	3	11		Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	31.4	− 2.5	68	6	3	17	57	3.52	− 0.92	1.10	8.0	14	10	9	9	W	G. W. Camn.
Berea	Madison	1070	13	34.3	− 0.6	66	6	5	24	50	3.03	− 0.52	0.93	8.0	12	9	8	11	NW	C. F. Rumold.
Catlettsburg	Boyd	544	25								4.28	+ 0.71	1.20	10.0	13					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								5.13	+ 1.89	1.74	11.6	12	12	3	13	N	J. V. Old'am
Farmers	Rowan	668	8	33.2		68	6	6	24	47	3.37		1.30	1.3	8	15	3	10	W	Lee Craycraft.
Hazard	Perry		0								2.95		0.90		12					Kelley E. Watts.
Jackson	Breathitt		4																	T. J. Turner.
London	Laurel		0																	C. R. Lee.
Louisa	Lawrence		2								3.49		1.00	7.0	10					Lucien S. Johnson.
Manchester	Clay		3								3.07		0.88		9					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	27.8	− 5.6	65	6	1	24	46	4.62	+ 1.17	1.43	16.5	13	14	3	11	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	37.7	− 1.3	62	3†	12	17	42	3.54	− 1.79	0.70	4.0	12	13	7	8		B. H. Perkins.
Mount Sterling	Montgomery	930	24	28.6	− 4.7	62	6	5	24	38	4.35	+ 0.08	2.00	15.5	10	11	3	14	N	Jas. O'Connell.
Pikeville	Pike		6								2.36		0.70	8.0	11					I. M. Williams.
Richmond	Madison	926	22	31.4	3.5	64	6	5	24	41	4.05	+ 0.41	1.38		13	6	5	17		J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	36.7		64	3†	10	17	50	3.55		1.00	6.0	10	3	9	16	N	O. A. Lund.
Williamsburg	Whitley	939	18	36.2	− 1.1	68	2	10	26	50	2.68	− 0.88	0.55	0.7	12	12	0	16	W	N. C. Jones.

All temperature data are taken from self-registering thermometers. Estimated and incomplete data are not considered in means.

All other records are used in determining section means, but the mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

MISCELLANEOUS.

Rain on the 13th with a temperature of 26° to 29° caused breaks in trolley, telephone and telegraph wires in Louisville and vicinity, and like conditions seem to have prevailed over the northern half of the State. Great damage of this character was reported, the losses in the vicinity of Owensboro alone being estimated at $15,000. Fruit and shade trees were badly injured by breaking down under the load of ice. A man was reported frozen to death near Georgetown.

Thunderstorms occurred generally over the State on the 6th. A solar halo was observed on the 26th and lunar halo on the 9th.

There was a sharp rise in the Ohio River from the 19th to 22nd, but flood stage was not reached at any point. There was considerable floating ice in the river at points above Louisville on the 19th and 20th and again from the 24th to the end of the month, which was sufficient at times to interfere with navigation.

Daily Precipitation for February, 1914.

STATIONS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Western Section																														
Beaver Dam	G			T		.80						.25	.20	.70	.50		....	.05	....	1.37				1.02	.05					[illegible]
Blandville	M			.33	.27	T.	.06				.21	.82	.14						.97	1.05			.23	.93	....					[illegible]
Calhoun	G			.58	.03	.02	.07	T			.25	.10	.32	.58	T	T	T		.60	1.93				.70	.03					[illegible]
Earlington	G	.03			.54	.07		.40			T.		T	.77	.10	T			....	1.87	.04			.98						4.80
Hopkinsville	C			.10	.35	....	.15	T			.25	....	1.00	.20	.02				.20	.75				1.70		T	T			[illegible]
Owensboro	O			.05	.10	.12		.20				.20		.15	.70	...	T.		....	2.25	.10			.12						[illegible]
Paducah	O			T	.25	T.	....	T			.20	.20		.80	.20					1.80	.20			.80	.10					
Central Section																														
Alpha	C				.25	.25	.50	T			T		T	1.00	.20	.30		..	.30	.26				T.	[illegible]		.30	....		[illegible]
Anchorage	O			.73	....	....	.78	T.		T			T	1.25	...	T.	.15	..	1.05	1.68				.55	T					6.19
Bardstown	S				.38	.21	....	...	.15			.20		.35	.27	....	.10			[illegible]	.10			.25	.16					[illegible]
Bowling Green	G			T	.22	....	.45	....	...			.25		.50						.25	[illegible]			.50			.05			[illegible]
Burnside	C				T	.20	.25	.25	T			.10		.22	.88		.03			.30	.28			.06	.10		.10			2.77
Cloverport	O		T	.02	.58	.10	....	.11	T			.18		.43	.52	....	.20	...		2.35	.10			.63	.05					5.27
Edmonton	G			T	.33	.21	.08	.50			.05	.05		1.03	....	.10			.09	.30				.64	.10					[illegible]
Eubank	C				....	.15	.16	.40						.60	.70	....	.01	.02		.10	.05			.15	.45		.06			2.85
Frankfort	K			T	.30	.24	....	.24				T		.47	.85	T.				1.50	.17			.21	.08					[illegible]
Franklin	G			.19	.25	.19	.50				.18		T	.88				T	T	.68				.19		.10		T		3.46
Greensburg	G				.08	.14	.14	.40	T			.25	...	.49	.41	.04	.02			.45	.30	...		.62	.12					3.47
High Bridge	K	T.			.08	.24		.68				.13	...	.35	.97		.05			.93	.35	...		.35	.10					[illegible]
Irvington	O			.67	.08	T.	.22	T			.14		.15	1.23		T.	.12	...	1.04	1.42				.60	....					5.67
Leitchfield	G			.50	.10	....	.09	T			.15		*	1.37		.07			*	1.33				.90	.02					4.53
Lexington	K		T.	.19	.20	.01	.26	T			.07		.14	.89	.01	.07	.01		.89	.77			.01	.35	T.					3.87
Loretto	S				.15	.06	.01	T			.10		...	1.20	.20	.02	.10		.08	1.05		T	.01	.10	.02					3.10
Louisville	O			.51	.24		.23	T			.05		.24	1.14		.11			1.84	.77			.20	.44						5.77
Do. (Cherokee Park)	O			.05	.68	.22	.10	.41			.07		T	1.59	.09	T	.14		....	2.60				.45	.10					6.50
St. John	S			T	.40	.23		T.				T	..	.80	T.		T		....	1.85	.25			.10	T.					[illegible]
Scott	L			.22	.04	.32	.03	.42	T		.17		.04	.81	.23	T.	.10		.21	.65			T	.74	T					4.97
Shelby City	K			....	.20	.14		.47			.18	....		.70	.14				.12	.76				.40						3.11
Shelbyville	S	.48	.72	....	T.		.46	.26	T				.08		1.45	....		.10	...	1.92					.29					5.76
Taylorsville	S			.34	.24	.10	.02	.17			.18		.03	1.36	.03	T	.08		.82	1.48	....			.68	.01					5.44
Williamstown	L	.03			.48	.12	.08	.15			...	.06		.30	.90	....	.10		...	.20	.15			.37	.21					3.15
Eastern Section																														
Beattyville	K			.10	.12	.18	.40	.16	.12			.20		.40	1.10		.06			.36	.12			.04	.16					[illegible]
Berea	K				.09	.20	.10	.45					.01	.60	.04		.12		.02	.93				.22	.25					3.03
Catlettsburg	B		.02		.02	.30	.04	.06	T			.12		.26	1.12	T	.20			1.20	.32			.18	.14					4.28
Falmouth	L	.02			.52	.33	.06	.25	T				T	.34	.76		.06			1.74	.30			.60	.15					5.13
Farmers	L					.38		.20				.05		.10	....			.21	1.10	1.30				.13						3.37
Hazard	K	.02				.19	.29	.30				.06		.42	.90		.05			.20	.19				.19		.14			2.95
Jackson	K				..	.13	.27	.14				.02		.51	.67					.21	.23						......			
London	C							....																T	.29		.13	...		
Louisa	B				.04	.20	.05	.09				.21		.50	.85					1.00	.35	....		T	.20					3.49
Manchester	K						.65					.23		.05	.88		.27			.50	.13				.11		.25			3.07
Maysville	O	.04			.31	.10		.12	.02			.02		.22	.87		.12			1.43	.20			.52	.35					4.62
Middlesboro	C					.15	.60	.25			.24			.70		.25	....			.20	.04			.55		.10	.16	.30		3.54
Mount Sterling	L				T	.29	.05	.06				.15		.35	.80	T	.25			2.00				.30	.20					4.35
Pikeville	B					.10	.20	.30				.16		.30	.70		.10			.20	.12	T		T.	.12	T	.06			2.36
Richmond	K				.05	.25	.05	.55	.04			.25		.62	.10		.08			1.38	.30			.04	.34					4.05
Weeksbury	B						.60	.20		.38				1.60	.45		.20			.30	.10					.12	.20			3.55
Williamsburg	C					.15	.43	.30				.13		.15	.43		.05			.18	.23			.08	.55		.10			[illegible]

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

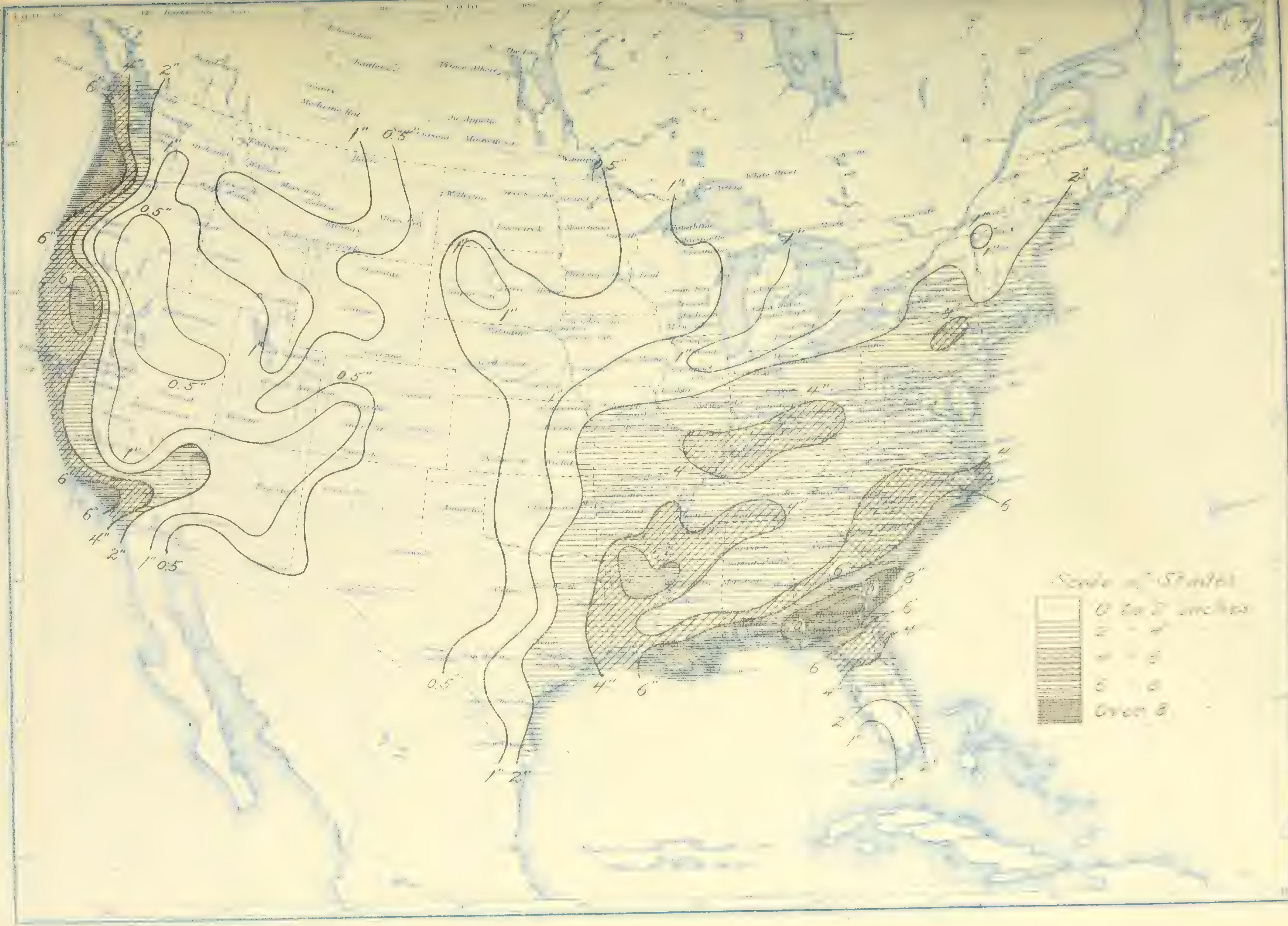
‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for February, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	52	58	47	34	40	59	20	31	47	37	38	31	33	26	35	31	60	51	43	42	47	63	29	26	26	35	43	53	..	..	..	40.6
	Minimum	28	30	36	29	30	31	16	12	15	31	26	25	24	11	10	10	14	31	37	25	23	35	28	7	13	19	24	30	..	..	..	23.2
Blandville	Maximum	50	61	56	41	37	44	32	29	46	42	40	31	32	28	38	38	63	58	58	43	48	61	50	24	33	43	53	59	..	..	..	44.2
	Minimum	30	35	41	27	29	32	10	13	21	33	26	27	15	13	17	12	21	45	33	27	25	40	16	9	16	20	29	35	..	..	..	24.9
Calhoun	Maximum	51	59	57	47	38	53	45	31	47	44	38	33	33	29	29	35	60	56	55	41	46	63	60	27	26	36	47	58	..	..	..	44.4
	Minimum	29	34	44	27	29	37	13	13	17	33	24	24	23	10	11	8	14	45	33	25	22	38	21	5	13	17	27	35	..	..	..	24.0
Earlington *	Maximum	55	61	49	32	48	57	22	32	49	37	40	32	32	27	36	35	61	57	43	42	50	66	27	21	26	40	52	60	..	..	..	42.5
	Minimum	28	28	28	29	29	30	14	10	17	23	25	26	25	12	10	11	12	34	37	25	24	27	26	6	10	16	21	30	..	..	..	21.9
Hopkinsville	Maximum	49	61	56	48	39	54	50	32	48	44	42	37	36	29	34	37	63	58	57	44	48	65	59	26	28	31	48	59	..	..	..	45.8
	Minimum	26	31	45	30	30	37	15	11	17	32	26	28	20	8	17	12	19	40	36	26	26	34	24	9	15	21	27	29	..	..	..	24.7
Owensboro *	Maximum	44	50	55	32	42	32	18	29	44	36	33	29	31	23	33	29	52	51	39	37	58	61	23	26	30	31	50	54	..	..	..	38.3
	Minimum	30	33	35	25	24	32	12	14	17	19	24	28	26	10	18	9	26	29	35	25	23	37	22	6	14	20	23	30	..	..	..	23.1
Central Section																																	
Alpha	Maximum	54	60	65	52	42	65	53	32	47	48	40	35	43	34	30	30	50	55	57	42	49	59	48	28	30	34	50	44	..	..	..	45.6
	Minimum	33	25	52	41	40	42	25	14	15	40	34	29	34	21	20	16	30	50	41	31	21	45	26	16	18	27	27	34	..	..	..	30.2
Anchorage	Maximum	46	58	52	45	35	60	46	28	46	37	35	30	31	25	26	31	51	48	45	37	40	58	22	24	29	35	42	51	..	..	..	39.8
	Minimum	27	26	42	28	28	34	14	12	12	24	24	18	19	0	-1	3	10	38	28	26	14	22	14	2	7	10	26	27	..	..	..	19.1
Bardstown *	Maximum	51	49	49	38	41	61	19	31	41	37	40	33	33	23	33	24	57	54	38	39	45	59	22	27	29	35	46	52	..	..	..	39.5
	Minimum	29	29	29	32	30	33	18	13	15	20	28	22	21	13	8	8	8	24	36	23	18	32	22	5	10	15	22	28	..	..	..	21.1
Bowling Green*	Maximum	50	60	56	55	58	46	45	46	49	37	44	39	36	29	36	30	64	57	43	45	50	65	33	30	28	32	52	58	..	..	..	45.5
	Minimum	27	24	27	29	30	15	11	14	27	33	26	25	25	15	13	11	10	30	40	24	21	23	28	7	13	22	22	27	..	..	..	22.1
Edmonton	Maximum	49	60	62	42	40	68	62	32	47	36	46	36	41	35	29	34	63	58	58	55	47	52	56	24	28	47	32	52	..	..	..	46.2
	Minimum	29	23	40	37	33	38	18	12	14	30	31	26	26	17	14	11	16	40	37	27	21	29	23	7	13	24	26	28	..	..	..	24.6
Eubank *	Maximum	50	59	62	52	50	66	59	55	45	43	40	38	37	35	32	30	59	56	56	31	44	58	50	48	34	34	48	48	..	..	..	47.1
	Minimum	28	26	29	36	23	33	20	12	14	15	30	22	22	15	9	12	10	19	48	26	20	20	27	6	6	13	21	24	..	..	..	20.9
Frankfort	Maximum	45	57	59	60	58	66	66	33	47	43	45	35	34	35	30	34	58	55	50	41	45	58	52	30	29	40	49	54	..	..	..	46.7
	Minimum	30	35	38	31	30	35	16	14	15	26	28	21	19	10	6	8	14	33	31	22	17	30	17	4	11	13	25	26	..	..	..	21.6
Franklin	Maximum	55	59	59	52	43	69	58	46	48	41	46	40	39	42	34	34	47	54	58	42	53	64	59	44	46	50	49	56	..	..	..	49.5
	Minimum	28	31	45	30	31	35	15	10	17	31	29	25	26	15	14	11	19	33	34	23	25	37	39	10	14	22	30	32	..	..	..	25.4
Greensburg*	Maximum	48	61	53	40	45	67	20	30	46	35	42	33	35	29	33	25	61	58	40	39	46	61	31	22	27	30	48	53	..	..	..	41.4
	Minimum	28	24	26	30	33	33	19	13	15	17	32	26	25	17	13	12	12	25	40	26	20	23	28	6	7	16	25	26	..	..	..	22.0
Irvington	Maximum	47	56	57	48	37	59	40	29	43	38	36	29	33	25	29	32	53	50	52	37	42	59	37	22	31	39	43	54	..	..	..	41.3
	Minimum	29	35	45	30	30	34	12	13	16	32	25	21	21	9	8	5	11	44	33	23	20	35	14	2	9	20	26	30	..	..	..	22.6
Leitchfield	Maximum	46	57	50	45	36	63	45	29	43	38	37	32	33	30	28	26	58	50	48	40	48	61	45	21	29	32	37	55	..	..	..	41.5
	Minimum	28	29	44	30	29	35	14	12	16	32	25	23	22	11	10	7	8	40	33	24	21	31	19	4	10	21	26	28	..	..	..	22.6
Lexington	Maximum	43	55	51	46	35	62	35	25	40	39	32	22	32	19	30	29	50	47	50	31	38	55	20	18	27	36	42	48	..	..	..	37.8
	Minimum	30	32	44	32	28	32	14	12	14	31	26	17	10	9	8	5	12	43	25	20	16	20	6	2	10	20	23	31	..	..	..	20.4
Loretto	Maximum	..	58	55	48	37	66	61	29	43	40	37	32	33	34	25	32	58	56	56	37	44	59	55	21	28	31	40	52	..	..	..	43.2
	Minimum	..	21	43	30	30	35	15	11	11	32	27	22	21	12	8	7	11	46	32	24	16	29	18	3	7	15	26	28	..	..	..	21.5
Louisville	Maximum	45	57	52	39	37	59	30	27	41	38	35	26	31	22	31	30	53	50	40	35	40	56	19	25	29	35	43	52	..	..	..	38.5
	Minimum	30	33	39	26	29	30	13	13	18	32	25	20	17	10	12	6	16	40	27	23	17	19	12	3	10	17	27	34	..	..	..	21.4
Do. (Cherokee Park)	Maximum	43	57	54	47	35	58	56	28	41	41	34	30	31	25	25	31	51	50	47	34	39	56	42	23	29	35	42	51	..	..	..	40.5
	Minimum	29	31	41	26	29	34	15	13	15	27	24	20	19	10	10	7	14	42	31	22	16	32	16	2	8	11	27	29	..	..	..	21.5
St. John *	Maximum	47	57	46	45	40	63	34	30	43	37	46	30	32	27	32	23	55	54	38	38	42	57	34	25	29	32	35	51	..	..	..	40.1
	Minimum	26	26	32	29	28	29	10	12	12	12	24	24	21	14	12	7	11	23	36	22	19	19	20	3	4	12	22	25	..	..	..	19.1
Scott	Maximum	43	55	58	45	35	53	50	26	39	35	32	23	21	24	27	23	48	44	40	39	33	45	18	18	33	40	40	47	..	..	..	36.8
	Minimum	27	27	44	24	24	31	15	11	6	27	18	12	14	3	2	3	14	35	25	16	8	18	12	-1	2	4	20	25	..	..	..	16.5
Shelby City	Maximum	47	60	55	51	39	63	58	30	43	38	38	32	33	35	27	32	58	55	55	35	43	58	52	24	27	38	50	52	..	..	..	43.5
	Minimum	30	24	39	35	30	36	17	12	14	30	29	21	22	13	12	9	9	42	32	25	19	29	19	4	10	17	23	29	..	..	..	22.5
Shelbyville *	Maximum	46	52	46	38	40	54	17	26	28	36	34	22	28	20	24	28	50	35	32	36	43	42	14	16	36	40	45	48	..	..	..	34.9
	Minimum	30	34	36	29	28	36	17	11	14	23	28	21	17	10	9	4	19	28	26	22	30	18	14	2	6	16	25	25	..	..	..	20.6
Taylorsville	Maximum	44	56	51	46	36	63	57	28	41	36	35	29	33	29	25	32	53	47	49	34	40	55	42	21	30	33	40	50	..	..	..	40.5
	Minimum	30	27	43	29	29	35	16	14	14	25	27	21	20	11	14	7	13	36	31	22	18	28	16	4	10	13	26	25	..	..	..	21.6
Williamstown *	Maximum	44	45	45	38	35	60	45	40	41	34	31	25	24	26	28	24	48	48	32	29	39	52	40	30	30	41	42	51	..	..	..	38.1
	Minimum	24	27	28	26	25	25	18	1	8	11	22	15	13	4	4	3	4	20	32	16	10	12	13	-2	-1	3	14	22	..	..	..	14.2
Eastern Section.																																	
Beattyville *	Maximum	51	61	64	47	43	68	26	35	48	37	40	38	35	28	32	24	60	54	55	39	48	54	28	29	31	47	55	54	..	..	..	44.0
	Minimum	30	18	18	35	34	34	24	14	10	12	25	20	20	14	8	9	3	18	39	25	13	19	23	8	7	11	18	20	..	..	..	18.9
Berea	Maximum	46	58	58	57	39	66	59	30	38	59	39	29	34	38	27	32	60	64	64	54	38	60	30	29	29	38	41	51	..	..	..	45.2
	Minimum	32	30	48	35	32	36	18	13	13	28	29	20	21	13	12	10	10	48	32	31	17	30	18	5	11	14	21	28	..	..	..	23.4
Farmers	Maximum	48	59	54	53	44	68	62	30	45	40	40	31	33	34	31	32	55	54	52	37	43	60	57	27	32	44	50	53	..	..	..	45.3
	Minimum	33	21	36	38	33	34	21	16	12	20	30	19	16	15	13	9	8	32	34	25	16	22	18	6	9	13	20	23	..	..	..	21.1
Maysville*	Maximum	48	60	48	45	37	65	26	30	44	38	35	22	32	27	30	24	51	48	36	33	41	51	29	27	33	46	47	52	..	..	..	39.5
	Minimum	30	22	22	32	28	28	24	13	10	10	27	17	15	7	3	5	5	24	35	19	13	13	15	1	2	3	4	21	..	..	..	16.0
Middlesboro	Maximum	51	58	62	62	55	60	58	35	45	38	45	40	41	37	32	35	54	54	61	40	48	57	57	40	35	47	43	43	..	..	..	47.6
	Minimum	33	23	32	41	45	47	25	15	15	27	33	24	35	23	20	16	12	43	39	31	21	26	40	15	18	26	25	27	..	..	..	27.8
Mount Sterling*	Maximum	42	53	52	43	39	62	24	26	40	42	33	22	32	20	19	21	28	51	42	33	37	56	19	24	30	38	42	48	..	..	..	36.4
	Minimum	31	28	30	38	31	32	22	15	16	26	30	19	17	14	13	9	10	20	28	25	17	18	19	5	11	12	18	25	..	..	..	20.7
Richmond *	Maximum	49	58	55	12	12	64	29	29	43	41	36	24	34	25	31	20	54	51	37	34	40	60	25	22	28	41	47	50	..	..	..	39.7
	Minimum	30	28	38	36	32	38	20	14	18	29	30	21	21	14	12	9	13	20	36	25	17	32	23	5	10	20	22	30	..	..	..	23.0
Weeksbury	Maximum	47	61	64	58	50	64	61	59	51	47	42	35	38	35	31	31	55	55	62	36	46	38	42	50	61	45	53	47	..	..	..	48.7
	Minimum	35	25	32	45	40	39	27	12	17	25	22	20	25	19	18	14	10	40	33	27	18	22	20	18	11	25	24	29	..	..	..	24.7
Williamsburg *	Maximum	51	68	62	54	48	63	37	36	62	33	43	50	42	42	36	27	66	60	60	42	35	63	61	30	40	43	46	40	..	..	..	48.0
	Minimum	30	22	24	42	41	42	29	15	15	15	18	24	24	21	21	17	16	22	52	30	19	20	35	14	20	10	21	27	..	..	..	24.5

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades
0 to 2 inches
2 - 4
4 - 6
6 - 8
Over 8
0.5"
1"
2"
4"
6"
8"

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CLIMATOLOGICAL DATA

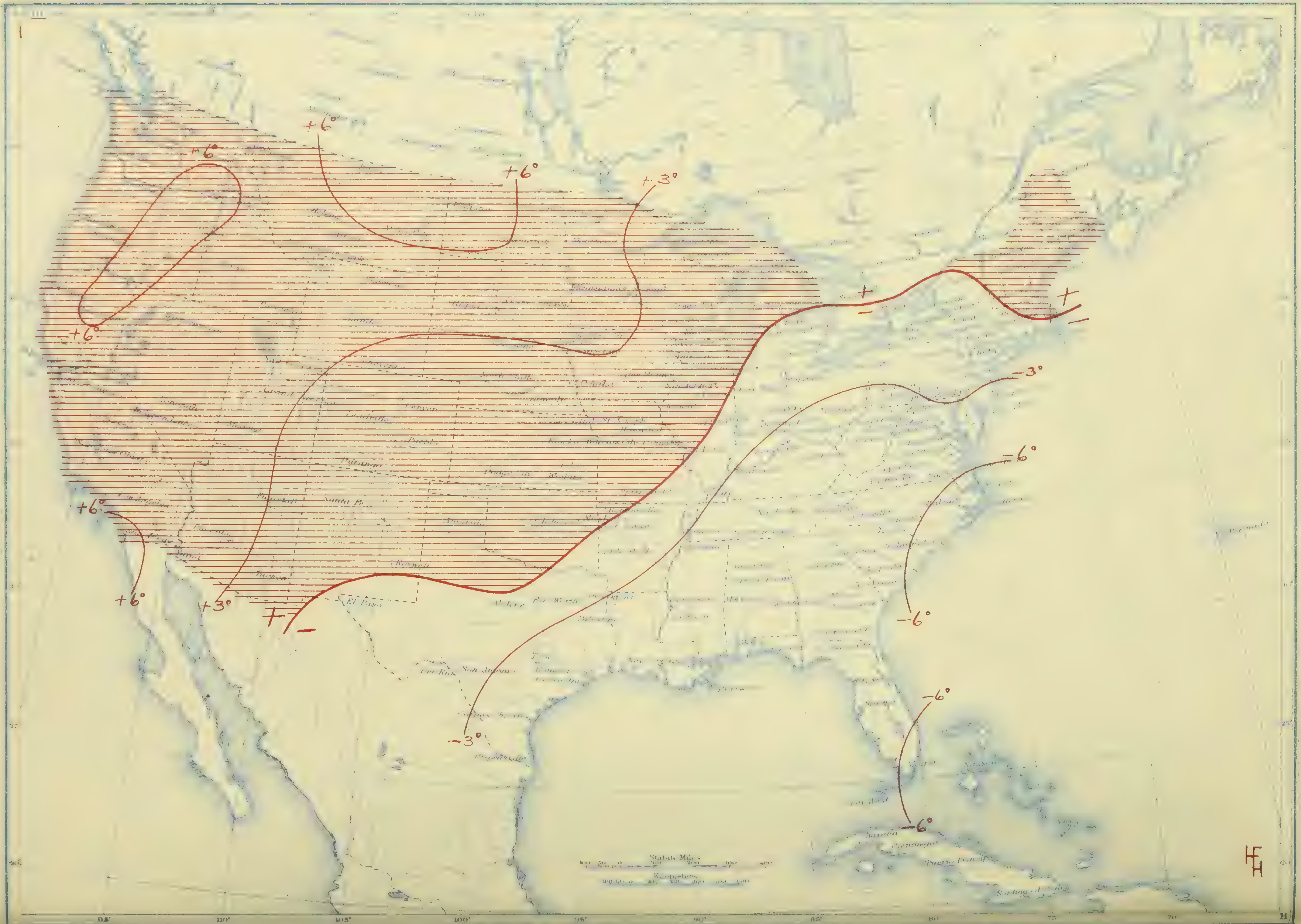
KENTUCKY SECTION

MARCH, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 30, 1914.

Departure of the Mean Temperature from the Normal, March, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XIX. LOUISVILLE, KY., MARCH, 1914. No. 3

GENERAL SUMMARY.

The notable features of the weather for the month were the equency and relatively large amount of snowfall, the large imber of days with temperature below normal, and the absence the usual stormy and blustery conditions characteristic of arch. Cold, disagreeable weather prevailed during the first ree weeks. The last week was warm, but generally cloudy and iny. On account of the low temperature, vegetation had made ttle progress and was unusually dormant and backward at the id of the month.

Precipitation was deficient in nearly all parts of the State, the ficiency being greatest over the northern counties, where the nount received was but little more than half the normal. There as a small excess over a few of the south central counties.

Over the northwestern counties, where the amount of precipitation was comparetively small, conditions were favorable r outdoor work, and more than the average amount of spring lowing was done; but in the southern and eastern counties unvorable conditions prevailed throughout the month, and spring ork was delayed.

PRESSURE.

Several disturbances passed over or immediately south of the tate during the month, producing conditions favorable for snow. ligh pressure areas largely dominated weather conditions except uring the last week. The mean sea level pressure, computed rom two stations, was 30.12 inches. The highest was 30.51 iches, on the 21st, at Louisville and the lowest 29.83 inches, at exington, on the 6th.

TEMPERATURE.

There were three cold periods, 1st-3d, 12th-13th and 19th-1st, with minimum temperatures ranging generally between 7° nd 15°. At a few stations in the southeastern counties, temperatures on the 21st ranged between 2° and 6°, the lowest for the tate being 2° on that date at Beattyville. The lowest temperatures in the central counties occurred generally on the 2nd. A reak in the cold weather occured during the 14th-16th, the highst temperature for the State, 78°, being registered at Earlington nd Hopkinsville on the 15th. It was also relatively warm from he 24th to the 31st, inclusive, and the highest temperatures for he month were registered in central and eastern counties durng this period. The monthly mean for the State, determined rom the records of 35 stations, was 41.8°, the average daily eficiency being 4.5°. The highest mean for the month was 6.2° at Franklin, and the lowest 38.1° at Beattyville. The nonthly range in temperature for the State was 76°.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 74 percent and at 7 p. m. 67 percent.

PRECIPITATION.

Precipitation was frequent, but usually light, during the first lecade, a large part of it being in the form of snow. On the 11th, moderate to heavy rains and considerable snow fell generally over the State, the heaviest occurring in the central and eastern counties. From the 17th to the 20th, there was a period of moderate precipitation, much of which was snow. On the 19th and 20th, 24 hour amounts of snowfall ranged from 2 to 10 inches practically over all the State, being heaviest in the mountain districts and over the southwestern counties. The total monthly snowfall over the eastern counties ranged between 5 and 15 inches, the latter amount occurring at Beattyville. Over the rest of the State it ranged generally between 2 and 7 inches, the average for the entire State being 6.4 inches.

Most of the rainfall occurred in the period 25th-31st, when light to moderate showers fell almost daily in all sections. The amounts were heavy at a few stations on the 30th. From the reports of 48 stations, the average amount for the month was 3.62 inches, which is 1.27 inches less than the State normal for March. The greatest monthly amount was 6.53 inches at Williamsburg, and the least, 2.14 inches, at Williamstown. There was an average of 12 days with .01 inch or more precipitation.

WIND.

The average hourly wind velocity at Louisville was 12.9 miles and at Lexington 11.5 miles, with a total movement of 9606 miles and 8572 miles, respectively. The maximum velocity for 5 minutes at both places was at the rate of 44 miles per hour from the northwest, on the 1st.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 56 and at Lexington 45, which is near the normal for March. The average number of clear days for the State was 10, partly cloudy 6, and cloudy 15.

MISCELLANEOUS.

Thunderstorms occurred in the central counties on the 10th, and in the central and western counties on the 28th and 29th. Some damage to peaches, pears, cherries and other fruits by the low temperatures of the 9th-14th, was reported from many sections of the State.

High stages prevailed in the upper reaches of the Big Sandy and Cumberland Rivers on the 31st, otherwise the streams of the State, including the Ohio, were at moderate stages throughout the month.

Comparative data for March.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	40.5	−5.8	84	18	1.52	−3.37
1890	41.2	−5.1	78	4	8.34	+3.45
1891	41.8	−4.5	71	9	8.08	+3.19
1892	40.6	−5.7	82	7	4.08	−0.81
1893	45.0	−1.3	89	5	2.76	−2.13
1894	50.8	+4.5	86	10	2.72	−2.17
1895	45.0	−1.3	88	15	3.17	−1.72
1896	41.1	−5.2	80	8	6.16	+1.27
1897	49.6	+3.3	86	20	7.94	+3.05
1898	50.7	+4.4	84	16	7.59	+2.70
1899	43.9	−2.4	80	−3	8.10	+3.21
1900	42.8	−3.5	81	−3	2.58	−2.31
1901	46.4	+0.1	87	3	3.50	−1.39
1902	47.2	+0.9	82	7	4.44	−0.45
1903	52.5	+6.2	85	19	4.43	−0.46
1904	47.7	+1.4	88	12	6.26	+1.37
1905	52.2	+5.9	86	22	4.45	−0.44
1906	39.2	−7.1	75	3	6.37	+1.48
1907	54.9	+8.6	92	18	2.28	−2.61
1908	51.8	+5.5	88	19	5.42	+0.53
1909	44.8	−1.5	74	17	5.14	+0.25
1910	55.0	+8.7	91	11	0.79	−4.10
1911	46.0	−0.3	87	7	2.57	−2.32
1912	41.3	−5.0	88	10	6.22	+1.33
1913	46.5	+0.2	85	9	7.22	+2.33
1914	41.8	−4.5	78	2	3.62	−1.27

Climatological data for March 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	42.4	- 5.1	71	30	14	20	32	2.53	- 1.81	0.68	3.3	9	13	5	13	S	W. T. Austin.
Blandville	Ballard	445	32	44.8	- 2.3	77	15	14	20	32	4.23	- 0.64	1.59	6.6	10	8	5	18	SE	E. W. Horr.
Calhoun	McLean	397	11	44.6	- 5.2	76	15	14	20	39	2.69	- 1.93	1.13	6.0	11	7	8	16	NW	W. A. Taylor.
Earlington	Hopkins	370	24	43.7	- 3.8	78	15	14	20	36	2.73	- 2.78	0.64	3.5	10	13	0	18	S	Brick Southworth.
Hopkinsville	Christian	524	18	44.2	- 6.4	78	15	14	2†	40	5.17	+ 0.20	2.62	8.0	10	7	3	21	N	W. F. Randle.
Owensboro	Daviess	479	17	41.8	- 6.8	73	15	15	1	33	3.19	- 0.65	0.92	5.5	11	11	4	16	NW	Henry S. Berry.
Padacah	McCracken	341	25								3.12	- 1.58	1.00	5.0	7					S. A. Fowler.
Central Section.																				
Alpha	Clinton		20	44.2	- 6.5	76	16	13	21	32	5.09	- 1.08	1.25	4.2	13	8	3	20	W	W. W. Hicks.
Anchorage	Jefferson	700	13	40.0	- 7.4	73	30	9	12	38	2.90	- 1.12	1.01	4.7	10	11	7	13	SW	C. E. Barret.
Bardstown	Nelson	637	17	42.4	- 5.2	74	29†	13	2	34	2.48	- 2.54	0.65	4.5	9	14	7	10	S	Thos. S. Talbott.
Bowling Green	Warren	500	25	43.4	- 5.2	77	15	13	2	39	5.97	+ 0.84	2.70	6.4	14	12	6	13	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								4.03	- 1.24	0.60	5.0	12					K. W. Massey.
Cloverport	Breckenridge		0								3.13		0.80	3.0	10					J. B. Randall.
Edmonton	Metcalfe	600	23	42.6	- 5.6	73	28	13	2	35	5.25	- 0.58	1.33	5.5	13	12	7	12	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	41.3a	- 5.0	73a	24	11a	2†	46a	4.65	- 0.60	1.65	0.5	12	9	4	18	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23					14	2	41	2.38	- 2.89	1.11	2.7	8	13	3	15	S	Mrs. M. J. Roberts.
Franklin	Simpson	691	20	46.2	- 3.9	74	15	16	2	36	6.01	+ 1.26	1.90	6.0	12	4	14	13	NW	J. E. Newman.
Greensburg	Green	581	22	41.4	- 5.4	74	30	14	2	39	3.00	- 2.50	1.12	2.0	11	10	4	17	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11								2.47	- 1.89	0.95	6.0	11					Miss Lulu Wood.
Irvington	Breckenridge		16	42.5	- 5.2	73	29	12	2	33	2.55	- 2.35	0.82	1.5	5	11	1	19	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	42.2	- 5.0	71	15†	13	2	33	2.44	- 2.78	0.69	3.5	10	10	7	14	W	John E. Stone.
Lexington	Fayette	989	26	39.6	- 3.8	71	29	12	2	28	2.24	- 2.48	0.97	5.6	13	8	5	18	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	42.6	- 5.5	72	29†	12	2	35	2.72	- 1.90	0.66	5.0	17	9	3	19		Loretto Academy.
LOUISVILLE	Jefferson	525	42	42.1	- 3.2	72	29	14	2	29	3.01	- 1.31	1.11	3.7	11	9	4	18	N	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.		4	42.5		74	29	15	2	35	3.35		1.15	6.0	10	7	12	12	S	Wm. I. Hunt.
St. John	Hardin	777	18	40.0	- 6.6	71	30	11	1†	37	2.29	- 3.05	0.65	3.0	6	11	3	17		Sisters of Loretto.
Scott	Kenton		16	39.5	- 4.8	73	29	11	2†	34	3.00	- 1.51	1.58	5.2	13	9	5	17	S	E. B. Wilson.
Shelby City	Boyle	1087	20	41.8	- 4.3	72	15†	12	2†	38	3.07	- 2.04	0.81	7.0	10	9	10	12	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	40.2	- 5.1	68	15†	12	2	25	2.57	- 2.34	1.09	3.0	8	13	9	9	W	C. R. Burnett.
Taylorsville	Spencer	489	12	41.2	- 6.4	74	29	14	2	36	2.89	- 1.67	1.38	2.5	16	8	5	18	W	E. D. Bourne.
Williamstown	Grant	943	11	40.0	- 4.9	77	30	13	2†	47	2.14	- 2.20	0.71	7.0	11	14	5	12		Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	38.1	- 8.1	77	29	2	21	56	4.68	- 0.38	0.98	15.0	17	8	9	14	W	G. W. Cann.
Berea	Madison	1070	13	41.6	7.9	76	26†	4	21	33	4.49	- 0.30	1.00	12.8	17	9	15	7	SW	C. F. Rumold.
Catlettsburg	Boyd	544	25								2.90	- 1.75	0.56	9.0	17					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								2.90	- 1.46	0.72	7.0	13	6	7	18	S	J. V. Oldham.
Farmers	Rowan	668	8	40.8		75	30	7	12	42	2.72		0.50	12.0	11	17	2	12	NW	Lee Craycraft.
Hazard	Perry		0								6.20		1.43	10.7	12					Kelley E. Watts.
Jackson	Breathitt		4								4.45		1.60		11					T. J. Turner.
London	Laurel		0								5.15		1.24	0.8	12	11	0	20	N	C. R. Lee.
Louisa	Lawrence		2								3.84		0.70	14.0	16					Lucien S. Johnson.
Manchester	Clay		3								5.01		0.98		11					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	38.5	- 7.0	75	26†	8	12	49	2.44	- 2.30	0.77	10.4	16	11	6	14	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	42.8	- 5.7	75	17	4	21	42	5.45	- 0.03	2.25	14.0	13	13	14	4		B. H. Perkins.
Mount Sterling	Montgomery	930	24	39.8	- 4.3	72	29	12	12	44	3.00	- 2.93		12.5						Jas. O'Connell.
Pikeville	Pike		6								3.54		0.60	11.0	13					I. M. Williams.
Richmond	Madison	926	22	41.2	- 4.1	72	28	13	2	31	3.22	- 1.50	1.10		14	10	8	13		J. W. Crooke.
Weeksbury‡‡	Floyd	1216	0	42.4		74	16†	4	21	36	4.02		1.40	5.0	7	10	6	15		O. A. Lund.
Williamsburg	Whitley	939	18	42.2	- 4.6	75	16†	6	21	41	6.53	+ 1.76	2.30	11.2	13	12	2	17	W	N. C. Jones.

All temperature data are taken from self-registering thermometers. Estimated and incomplete data are not considered in means.

All other records are used in determining section means, but the mean departures from normal temperature and precipitation are based only on records from statio that have ten or more years of observation.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for March, 1914.

Stations		Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam‡	G	T						T		.08		.43							.18		.28						.20	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Blandville	M	T		T	.22		T	.04	T			.39					T	.18		[illegible]					[illegible]			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Calhoun	G	T	T		T	T	T.	.10	.05			.49					T	.12		[illegible]	.11		T			[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Earlington	G	T						.08	.16			.50							.10		.35						.31	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
Hopkinsville	C				.10			T	.15			.58						.25		[illegible]						.10		.62	.05	2.62		.15	5.17
Owensboro	O	T				.02		.04			.10	.92								.50						[illegible]	.30	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Paducah	O	T			T	T		T.	.05	T		.50	T.							T	.50					[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
Central Section.																																	
Alpha	C	.01				.16	T.	.20	.01		T.	1.25						.15	T.	.20			T.			T.	.10	.40	.35	1.20	.45	.61	[illegible]
Anchorage	O	T.				T.		.06	.02		.03	1.01						.13		.10			T.			.26		1.00		[illegible]		[illegible]	2.90
Bardstown	S				T.	.03			.10			.25							T		.35						T	[illegible]	.20	.27	.12	.51	2.48
Bowling Green	G					.02	T	.01	.02	T		.93	.06					T.	.38		.60	.01					.40	.20	.10	.17	2.70	.37	[illegible]
Burnside‡	C	T	T		T	.20	.30	.05	.10	T		.60	.30						.43		.40			T			T	T	.60	.30	.45	.30	[illegible]
Cloverport	O					.04		T.	.05	T.		.80						T.	.21		.12			T		T	.34	.76	.25	.17	.39		3.13
Edmonton	G						.25	.08	.04		.01	1.33						.34		.40						.06		.26	.13	.61	1.00	.74	[illegible]
Eubank	C		.02			.12	.17		.05	.06		1.40	.15						.30		.28							.25			1.65	.20	4.65
Frankfort	K	T	T.			T	T	T	.05	T		1.11	T					T	.10	T	.10			T			.10	.40	.29	.23	T.	T.	2.38
Franklin	G	T.			T	.22	T.	.08	.10			.92						.46	T	.30						.18	T	.60	.02	.83	1.90	.40	6.01
Greensburg	G	T.			T	.13	.13	T.	T.			1.12							.45		.18						.05	.13	.20	.40	.12	.09	3.00
High Bridge	K	T	T			.05	.13		.05			.95	.02						.19		.45							.30	.13	.15	.05		2.47
Irvington	O	T.				T	T	T	T		T	.82					T	T.		.31	T					.27	T.	.53		.62		T.	2.55
Leitchfield	G	T.			T.		T.	T.	.10		*	.52						.24		.20						.10		.69	*	.45		.14	2.44
Lexington	K	.01				.12	T.	.01	.01	T.	.54	.43					T	.11	T	.16	.02		T			.04		.59		.14	.06	T	2.24
Loretto	S	T.				.09	.01	.03	.03	T.	.01	.66	.02	T	T			.17	.20	.15	.25		.02	.02		.04	T.	.32	.05	.22	.32	.11	2.72
Louisville	O	T		T.		T.	T.	.01	.02		.45	.59						.16	T.	.03			T			.24		1.11	.12	.25		.03	3.01
Do. (Cherokee Park)	O	T.				.04	T.	T.	.05			1.15							.18	T.	.18					.23		.97	.05	.46		.04	3.35
St. John	S	T.	T					T.	T.	T.		.65							T.		.32						.15	.50	.35	.32	T.	T.	2.29
Scott	L	.01	T.		T		.02	.10	.10	T.		.29						T	.06	.01	.02		T			.08		1.58	.21	.36	.16		3.00
Shelby City	K					.27	.05				.04	.81						.36		.25	.25					T		.55		T.	.39	.10	3.07
Shelbyville‖	S	T.				T.				.02	.11	1.09							.05	.10							1.00		.15			.05	2.57
Taylorsville	S	.01			.01	.03	T	.01	.02		.02	1.38					T.	.10		.13	.01		T			.11		.74	.01	.26	.01	.04	2.89
Williamstown	L	.03						.01	.08	T.		.71							.05		.08						.04	.53	.45	.14	.02		2.14
Eastern Section.																																	
Beattyville	K	.12	.14		T.	.12	.28	.08	.18	.30		.98	.40					T.	.32	.06	.44							.10	.26	.28	.52	.10	4.68
Berea	K	.24				.34	.08	.02	.12	.08	.12	1.00					T	.18	.52	.21	.52		.02			T		.12	.30	T	.60	.02	4.49
Catlettsburg	B	.08	.08			.04	.20	.08	.10	.04		.56	.14						.20	T.	.22			.04			.06	.12	.46	.18	.30		2.90
Falmouth‖	L	.05	.05					.06	T.	.05		.72	T.						.09	.02	.07						.15	.67	.55	.17	.25		2.90
Farmers	L					.30	.12		T.			.20	.40	.40	.10				.30	T.	.10	.20	.10				.50						2.72
Hazard	K		.03			T.	.50	.03	.10	.12		1.29	.44						.80	T	.57	T					T.		.18	T.	1.43	.71	6.20
Jackson	K		.15			.14	.31		.15			1.60	.20						.30		.30								.30	.30	.70		4.45
London	C		T.			.17	.36	T.	.15			.75	.30						.34		.90						.05		.24	.34	1.24	.31	5.15
Louisa‖	B	.05	.25				.40			.05	.05	.50	.35						.45	.05	.70						.05	.10	.23	.28	.17	.16	3.84
Manchester	K		.07				.23			.10		.97	.60						.32			.42					.25		.35		.98	.72	5.01
Maysville	O	.02	.04				.09	.02	.06	.04		.39	.08					T.	.06	.02	.06			T			.03	.42	.77	.26	.08		2.44
Middlesboro	C	T.					.15	.17	.13			.55						.28	.56			.56				.03		.03	.14	.32	2.25	.28	5.45
Mount Sterling	L																																3.00
Pikeville	B	T.	.06			.12	.36	T.	.04	.06		1.10	.40						.24		.50	T.					T		.06	.30	.60	.20	3.54
Richmond	K	.03	.04			.10	.25	T.	.05	.03		1.10	.04					T.	.02	T.	.60						T	.37	T.	.25	.30	.04	3.22
Weeksbury	B					.32		.10	.10			1.30								.50											1.40	.30	4.02
Williamsburg	C		T			.30	.25	.24	.05	.03		.20	.35						1.20	T	.75								.08	.10	2.30	.68	6.53

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

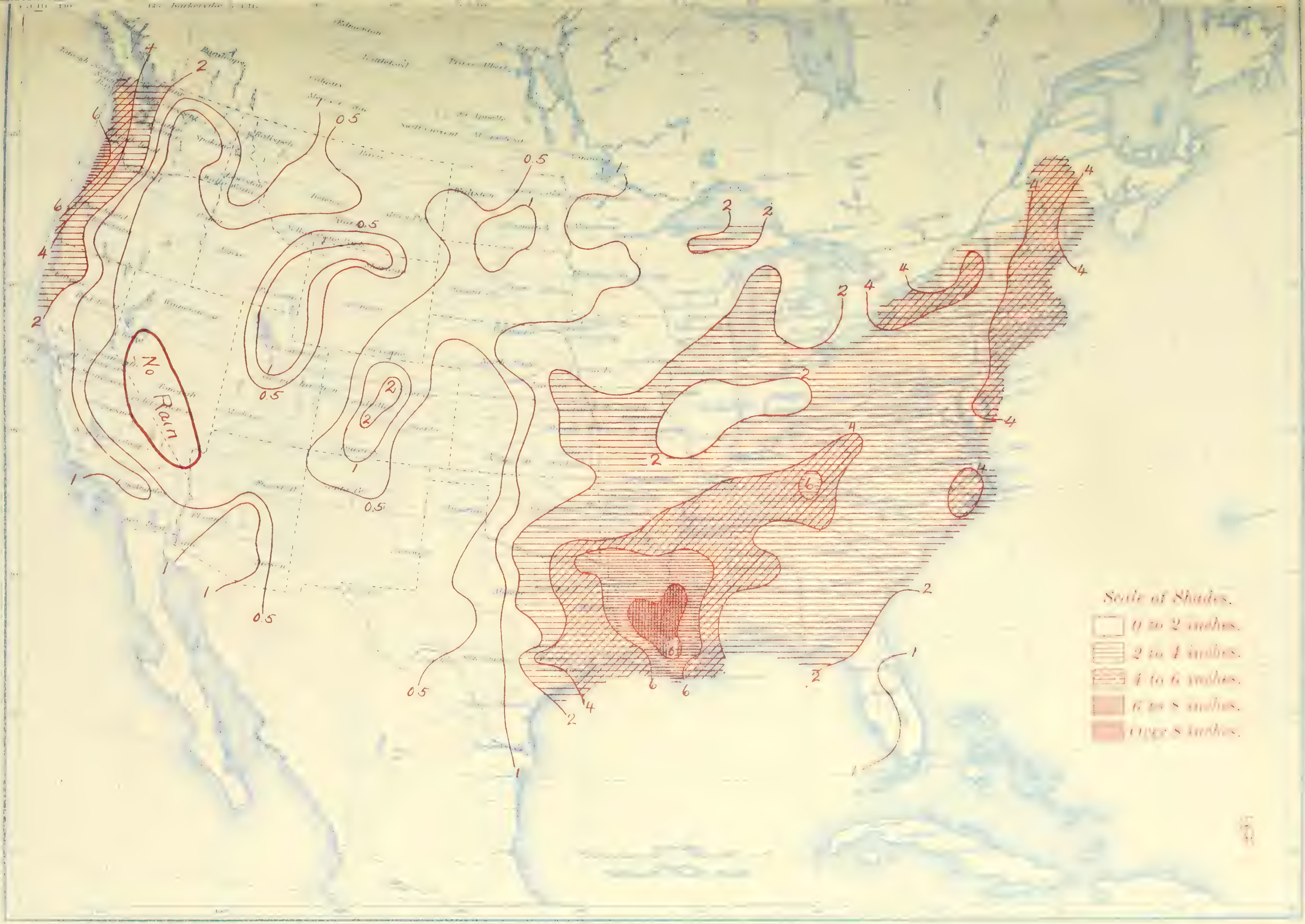
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for March, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	23	35	48	45	41	40	36	32	40	57	35	43	54	66	70	63	48	37	31	36	43	39	50	64	65	69	67	67	70	71	65	50.0
	Minimum	22	15	20	31	35	28	28	29	27	30	34	25	29	34	41	44	36	29	30	14	25	28	30	32	50	51	58	53	59	57	52	34.7
Blandville	Maximum	30	37	38	40	50	47	39	40	48	61	52	43	57	69	77	62	49	44	37	46	43	43	59	65	61	66	66	72	69	73	71	53.4
	Minimum	22	16	25	29	35	33	31	30	25	35	30	29	29	37	45	49	41	30	24	14	25	27	31	51	49	57	57	53	59	57	51	36.3
Calhoun	Maximum	54	37	48	47	47	44	39	33	47	59	54	44	57	67	76	71	53	41	35	37	45	41	57	65	62	70	68	68	71	71	70	54.1
	Minimum	15	15	21	30	34	31	32	28	26	33	33	25	26	38	45	51	31	27	26	14	25	28	32	39	47	55	57	54	59	58	52	35.1
Earlington *	Maximum	24	36	50	47	47	45	36	33	49	64	35	44	59	69	78	66	49	49	31	38	45	41	58	67	68	71	65	70	70	71	69	53.0
	Minimum	15	15	24	25	31	28	31	28	25	29	33	27	24	30	45	52	33	28	29	14	20	29	32	37	52	50	59	52	58	57	53	34.4
Hopkinsville	Maximum	52	38	46	45	46	46	42	35	48	61	58	45	58	68	78	68	54	42	37	36	42	42	60	67	66	72	67	70	68	74	70	54.9
	Minimum	17	14	20	32	35	26	29	27	24	34	32	26	22	31	38	47	37	29	27	14	22	26	26	32	47	54	57	49	58	57	53	33.6
Owensboro *	Maximum	22	32	44	46	46	41	37	33	40	56	36	40	56	66	73	46	36	35	36	42	39	47	55	60	60	67	68	69	70	67	60	49.2
	Minimum	15	16	20	30	34	30	31	27	26	30	33	26	31	35	40	33	28	26	16	29	30	31	32	38	45	47	57	54	58	60	54	34.3
Central Section																																	
Alpha	Maximum	25	34	47	47	44	43	37	32	43	59	43	43	53	63	69	76	57	42	34	38	40	35	55	67	62	67	62	73	72	67	62	51.3
	Minimum	18	14	19	36	39	35	32	29	29	34	35	23	21	32	52	48	39	32	29	22	13	23	35	45	54	59	60	60	62	60	57	37.0
Anchorage	Maximum	38	32	46	46	40	49	40	33	41	51	43	37	52	52	71	60	51	38	30	36	38	36	46	66	56	70	62	62	68	73	61	49.2
	Minimum	16	13	17	30	28	26	31	26	26	24	27	9	21	32	36	42	26	24	23	17	20	24	24	28	41	50	54	56	58	56	51	30.8
Bardstown *	Maximum	21	32	51	45	40	50	38	35	45	55	35	42	50	65	72	68	60	39	29	38	40	43	54	68	60	65	60	73	74	74	63	51.1
	Minimum	19	13	17	28	33	28	31	28	27	32	32	20	25	32	42	50	32	29	26	17	21	26	29	35	43	50	56	55	57	60	54	33.8
Bowling Green*	Maximum	45	38	50	45	42	49	37	35	49	61	51	48	59	69	77	69	59	42	32	38	40	43	52	68	68	71	63	74	69	75	75	54.6
	Minimum	16	13	15	31	30	29	28	25	26	30	32	22	21	30	39	46	35	27	27	16	21	21	26	35	42	45	52	53	58	56	54	32.3
Edmonton	Maximum	48	34	49	42	47	50	40	34	46	60	56	40	53	60	72	69	56	39	33	29	33	37	56	65	59	69	66	73	70	70	65	52.3
	Minimum	16	13	18	22	32	28	28	28	28	30	31	21	21	28	40	52	35	29	25	17	28	19	28	30	40	50	56	56	58	56	56	32.9
Eubank *	Maximum	37	34	49	48	48	47	41	35	42	60	49	45	51	63	70	68	52	52	42	39	40	35	51	73	70	61	..	71	72	70	63	52.6
	Minimum	20	11	11	15	30	38	29	26	24	27	33	17	18	19	32	43	32	28	20	17	11	20	24	27	49	53	56	..	57	57	55	30.0
Frankfort	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	18	14	19	33	31	29	33	28	28	28	31	18	22	32	35	52	31	27	24	21	23	27	30	38	41	50	56	53	55	60	57	33.7
Franklin	Maximum	49	45	49	47	58	65	59	55	60	69	55	42	54	66	74	71	52	42	35	36	37	40	59	66	59	69	64	70	67	71	64	56.4
	Minimum	18	16	24	35	34	32	31	27	24	35	31	25	26	37	45	51	40	30	27	17	21	27	31	39	49	53	57	57	59	58	56	35.9
Greensburg*	Maximum	20	34	48	43	45	52	38	35	46	61	34	40	53	65	71	69	50	38	30	32	38	38	55	67	61	72	62	72	70	74	66	50.9
	Minimum	19	11	16	20	30	27	29	30	27	28	24	21	21	26	34	42	33	30	26	16	19	24	28	28	37	49	54	55	56	57	56	31.8
Irvington	Maximum	46	33	46	44	46	45	37	36	42	56	48	40	53	65	70	64	52	40	35	33	42	37	52	65	58	70	63	71	73	70	65	51.5
	Minimum	13	12	21	29	33	30	32	26	27	33	30	21	25	35	41	47	30	26	25	14	26	26	29	35	47	52	56	54	56	55	51	33.5
Leitchfield	Maximum	40	32	46	44	44	46	36	34	44	60	50	39	53	64	71	63	53	39	32	34	41	38	53	65	59	71	63	70	71	71	64	51.3
	Minimum	15	13	20	30	33	30	29	26	25	33	30	23	22	32	38	45	30	26	23	15	24	25	28	32	49	50	57	55	59	55	54	33.1
Lexington	Maximum	38	30	42	38	40	46	37	30	37	49	38	30	46	60	67	62	53	35	25	28	32	35	48	63	59	69	60	68	71	69	59	47.2
	Minimum	14	12	18	30	30	28	29	25	26	30	20	13	25	34	42	44	35	25	21	17	19	26	28	35	48	50	54	52	55	56	48	31.9
Loretto	Maximum	49	34	48	44	43	49	40	35	43	57	49	38	51	64	69	68	55	39	34	34	39	36	52	65	64	71	68	71	72	72	65	52.2
	Minimum	16	12	15	32	32	29	29	26	26	28	31	19	21	33	44	52	26	27	23	18	18	25	28	30	48	51	56	55	58	58	54	32.9
Louisville	Maximum	40	32	44	45	42	46	38	33	42	52	38	37	51	64	70	60	51	35	29	36	39	35	49	65	57	69	60	68	72	70	62	49.4
	Minimum	15	14	24	31	32	34	32	28	30	34	26	20	28	40	46	45	35	25	25	19	26	30	32	36	49	54	57	50	54	55	52	34.8
Do. (Cherokee Park)	Maximum	51	33	44	43	41	46	39	37	41	51	47	35	51	64	70	66	54	41	34	34	38	37	51	66	61	71	68	68	74	72	63	51.3
	Minimum	17	15	20	31	32	29	33	28	29	30	30	16	23	35	40	51	30	26	25	18	25	28	30	31	46	51	57	52	55	60	52	33.7
St. John *	Maximum	28	35	43	43	42	48	39	35	45	55	33	38	51	63	69	65	54	38	27	32	39	36	53	63	57	68	60	69	69	71	63	49.4
	Minimum	11	12	16	24	28	23	30	28	23	27	31	21	22	26	37	44	28	27	26	13	11	24	29	31	35	49	53	54	55	58	54	30.6
Scott	Maximum	42	29	42	41	38	47	38	33	38	48	41	38	46	61	67	60	50	38	28	32	40	38	47	65	57	69	65	62	73	69	60	48.5
	Minimum	16	11	14	29	27	29	30	25	20	26	25	11	22	30	40	49	31	23	19	20	20	25	29	31	45	46	55	43	48	59	47	30.5
Shelby City	Maximum	44	32	45	42	43	47	40	38	40	55	47	41	52	64	72	66	56	40	32	32	34	36	55	69	62	71	63	71	72	70	64	51.5
	Minimum	16	12	19	30	32	30	30	28	27	28	28	14	20	29	42	49	30	27	22	12	13	24	27	31	43	48	55	56	58	58	53	32.0
Shelbyville *	Maximum	20	31	40	43	44	38	33	31	40	44	33	43	52	58	68	64	49	30	22	30	34	38	46	62	66	56	64	68	68	60	70	46.6
	Minimum	14	12	20	31	30	35	21	22	28	30	30	18	33	39	46	50	38	25	22	20	22	28	28	38	46	50	50	56	58	48	58	33.7
Taylorsville	Maximum	45	32	43	41	43	44	39	34	42	52	44	36	49	63	68	60	54	39	32	32	38	35	50	64	58	71	67	69	74	71	63	50.1
	Minimum	17	14	19	32	32	26	32	28	28	28	30	19	23	31	33	48	29	27	24	17	21	27	28	28	38	49	55	54	56	59	52	32.4
Williamstown *	Maximum	37	30	46	45	36	51	43	34	40	41	60	38	62	63	69	60	55	32	27	34	40	39	50	65	57	72	59	59	74	77	69	50.5
	Minimum	16	13	14	17	27	29	29	26	24	25	26	13	15	36	36	47	34	26	18	18	18	22	27	30	32	49	53	45	45	45	59	29.5
Eastern Section.																																	
Beattyville *	Maximum	23	35	51	50	43	53	41	35	40	51	37	43	54	68	75	70	63	34	28	37	37	42	55	72	67	73	63	73	77	71	62	52.4
	Minimum	21	12	10	18	30	32	24	26	23	21	28	16	14	19	26	26	21	22	12	12	2	8	15	16	23	30	40	42	46	56	46	23.8
Berea	Maximum	45	38	45	54	48	50	39	35	40	56	46	31	50	63	74	63	61	38	38	30	31	39	55	50	66	76	65	76	74	71	63	51.9
	Minimum	15	12	15	40	34	32	30	26	25	26	27	15	20	31	46	52	30	20	18	16	4	23	28	31	35	43	53	56	56	59	55	31.4
Farmers	Maximum	25	33	16	44	42	52	40	36	47	55	49	38	50	64	73	68	60	40	29	35	37	42	52	67	73	69	69	68	69	75	67	52.1
	Minimum	10	12	12	29	30	33	32	28	27	22	30	7	14	24	34	33	27	27	21	17	14	21	30	25	32	50	53	51	54	61	50	29.5
Maysville*	Maximum	22	34	45	45	40	53	41	35	41	54	34	38	50	64	71	65	59	33	28	36	39	43	50	68	63	75	60	60	75	74	59	50.1
	Minimum	19	11	12	15	29	30	30	28	20	20	23	8	9	16	33	45	28	29	21	21	16	19	28	19	26	40	50	45	45	51	49	26.9
Middlesboro	Maximum	43	35	18	47	45	50	41	36	41	57	57	43	52	61	69	74	75	46	36	38	41	44	55	66	68	70	66	74	73	69	68	54.5
	Minimum	17	13	18	28	37	36	23	28	27	26	34	27	20	24	30	32	33	30	24	23	4	27	20	26	36	44	51	57	57	58	55	31.1
Mount Sterling*	Maximum	42	41	43	41	42	48	42	35	41	36	32	32	41	58	67	55	55	30	28	31	41	40	49	64	62	70	62	65	72	70	60	48.2
	Minimum	22	20	31	31	32	28	28	28	24	24	32	12	14	14	31	46	29	29	22	16	17	20	36	29	38	55	54	54	53	58	48	31.5
Richmond *	Maximum	20	32	15	42	43	19	40	35	40	56	32	37	49	63	70	68	58	30	27	31	32	35	53	66	60	71	70	72	70	64	62	49.1
	Minimum	18	13	20	30	32	32	30	28	27	29	32	14	22	36	43	52	36	28	22	16	15	22	28	35	46	52	56	54	55	58	53	33.4
Weeksbury	Maximum	45	33	47	46	46	46	41	36	34	57	51	51	46	63	71	74	66	46	30	31	37	53	62	60	67	74	65	71	65	74	66	53.4
	Minimum	14	12	16	28	33	38	30	29	25	24	28	23	20	27	40	41	35	29	20	20	4	21	29	34	37	46	50	56	57	54	55	31.5
Williamsburg *	Maximum	36	40	48	50	46	50	50	40	47	62	42	43	52	68	72	75	60	40	35	37	40	42	45	66	65	70	72	75	74	70	62	54.0
	Minimum	17	13	15	17	34	32	24	36	28	23	34	25	18	30	31	36	33	32	24	22	6	7	25	27	33	42	51	57	58	65	52	30.5

---

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
0.5
1
2
4
6
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

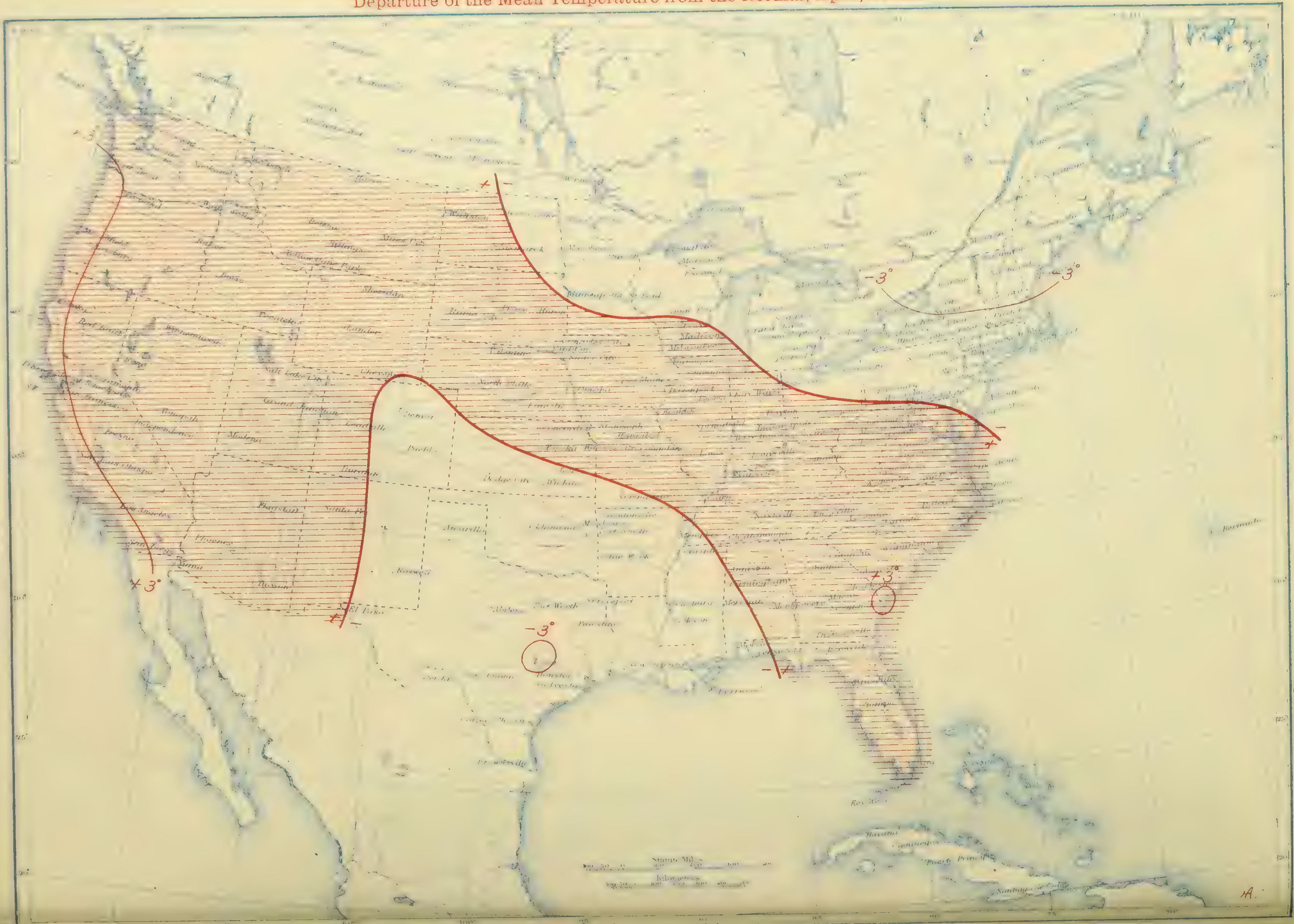
KENTUCKY SECTION

APRIL, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 23, 1914.

Departure of the Mean Temperature from the Normal, April, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XIX. LOUISVILLE, KY., APRIL, 1914. No. 4

GENERAL SUMMARY.

The first half of the month was unseasonably cold, with temperatures below normal on nearly every day and temperatures of freezing and below on several days; while the last half, except the 20th and 21st, was warm with mean daily temperatures generally above normal.

The total precipitation for the month over the northern and western counties and portions of the upper Cumberland basin, ranged between 2 and 4 inches, being generally deficient over those sections, with little more than half the normal amount in some localities. Over the south-central and southeastern counties, precipitation ranged between 4 and 6 inches, which is somewhat more than the normal amount for April in those sections.

The frequent rains during the first two decades, delayed farm work in some sections, and the unseasonably cold weather of the first two weeks retarded the growth of vegetation; but the unusually favorable conditions prevailing during the last decade caused rapid plant development, and also enabled farmers and gardeners in great measure to bring their work up to an average for the season.

PRESSURE.

During the first half of the month, high pressure dominated weather conditions over the State, but well-developed low pressure areas were frequent during the last half. The mean sea level pressure, computed from two stations, was 30.06 inches. The highest was 30.34 inches at Louisville on the 30th and the lowest 29.77 inches at Lexington on the 15th.

TEMPERATURE.

During the period 4th-13th, minimum temperatures ranging between 13° and 37° occurred in all parts of the State, the lowest temperature, 13°, being reached at Beattyville on the 10th. On the 9th and 10th freezes and killing frosts were general over the State. Also on the 21st, minimum temperatures of 27° to 35° were registered in most localities, and the last killing frost for the season occurred on this date, as a rule, in the central counties.

The highest temperature for the State was 91° at Beattyville, on the 28th, and the monthly range in temperature 78°. The monthly mean for the State, determined from the records of 35 stations, was 55.7°, the average daily deficiency being 0.2°. The highest mean for the State was 59.6° at Franklin, and the lowest 51.2° at Greensburg.

HUMIDITY.

At Louisville, the average relative humidity at 7 a. m. was 72 percent and at 7 p. m. 63 percent.

PRECIPITATION.

Precipitation was well distributed throughout the month and the daily amounts were generally moderate, only two stations reporting rainfalls of more than 2 inches in 24 hours. The periods when most of it occurred were: 1st-2d; 7th-8th, 12th, 14th-15th, 19th-20th and 25th-26th. Snow flurries were reported from several stations in the eastern part of the State on the 9th. From the reports of 48 stations, the average amount for the month was 3.62 inches, which is 0.45 inch less than the monthly normal. The amounts at the various stations ranged between 1.83 inches at Williamstown and 6.23 inches at Middlesboro. There was an average of 10 days with .01 inch or more precipitation.

A notable feature in precipitation for the months January to April, 1914, inclusive, is the accumulated deficiency in the western and northern counties, which ranges from 3 to more than 5 inches in most localities. The extent of this deficiency is illustrated by the following examples: Bardstown, 4.68 inches; Beaver Dam, 5.16 inches; Bowling Green, 5.13 inches; Earlington, 4.61 inches; Lexington, 4.28 inches, Maysville, 3.70 inches, Paducah, 5.02 inches and St. John, 6.99 inches.

WIND.

The average hourly wind velocity at Louisville was 12.8 miles and at Lexington 10.2 miles, with a total movement of 9182 miles and 7335 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 58 miles per hour from the south on the 18th, and at Lexington 39 miles per hour from the southwest on the 1st.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 50 and at Lexington 54, which is about the usual amount for April. The average number of clear days for the State was 11, partly cloudy 8, and cloudy 11.

MISCELLANEOUS.

The low temperatures of the 9th, 10th and 21st caused some damage to pears, and peaches in the central and western counties. Thunderstorms occurred on the 1st, 16th, 17th, 19th, 24th, 25th, 26th, 27th and 28th, mostly in the central counties. At Bowling Green, Ky., on the 25th, a negro named Tom Lively was killed and another man rendered unconscious when a barn was struck by lighthing, a horse also being killed by the same bolt.

The rivers of the State, including the Ohio, were at good stages throughout the month.

ERRATA.—February, 1914: Lexington—lowest temperature should be 15 on the [illegible]th and 11 on 23d, mean minimum temperature should be 20.8 and monthly mean temperature 29.3. March, 1914: Loretto—number of days with .01 or more precipitation should be 19.

Comparative data for April.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	57.0	+1.1	89	24	1.61	−2.46
1890	57.0	+1.1	92	28	4.04	−0.03
1891	58.0	+2.1	92	24	2.52	−1.55
1892	56.0	+0.1	88	22	7.12	+3.05
1893	58.0	+2.1	94	21	6.99	+2.92
1894	56.0	+0.1	94	23	3.54	−0.53
1895	57.2	+1.3	94	22	3.18	−0.89
1896	63.6	+7.7	96	24	1.65	−2.42
1897	55.5	−0.4	90	25	6.03	+1.96
1898	52.4	−3.5	86	19	3.38	−0.69
1899	57.2	+1.3	96	20	3.16	−0.91
1900	56.2	+0.3	90	15	2.15	−1.92
1901	50.9	−5.0	91	23	4.01	−0.06
1902	54.2	−1.7	93	22	2.65	−1.42
1903	55.4	−0.5	90	22	4.43	+0.36
1904	50.8	−5.1	85	16	2.83	−1.24
1905	56.7	+0.8	94	23	3.00	−1.07
1906	59.5	+3.6	94	23	1.40	−2.67
1907	48.2	−7.7	87	19	2.78	−1.29
1908	59.8	+3.9	89	23	6.56	+2.49
1909	56.1	+0.2	96	21	5.98	+1.91
1910	55.4	−0.5	88	23	5.14	+1.07
1911	53.8	−2.1	90	20	7.06	+2.99
1912	58.4	+2.5	87	25	7.90	+3.83
1913	55.3	−0.6	89	27	2.73	−1.34
1914	55.7	−0.2	91	13	3.62	−0.45

Climatological data for April 1914.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	56.8	+ 2.0	87	28	24	9†	44	2.98	− 1.64	0.80	0.0	10	10	6	14	SW	W. T. Austin.
Blandville	Ballard	445	32	57.4	+ 0.2	84	17	24	9	33	3.84	− 0.35	1.11	0.0	9	9	13	8	NW	E. W. Horr.
Calhoun	McLean	393	11	58.6	....	85	17	24	9	34	3.08	− 1.76	1.06	0.0	13	4	21	5	N	W. A. Taylor.
Earlington	Hopkins	370	24	57.0	− 0.2	87	17	22	9	49	2.54	− 1.78	1.09	0.0	8	11	18	1	N	Brick Southworth.
Hopkinsville	Christian	524	18	55.6	− 0.8	89	17	24	9†	47	4.72	+ 0.47	1.45	0.0	8	11	1	18	N	W. F. Randle.
Owensboro	Daviess	479	17	55.2	+ 0.5	84	17	25	9	38	2.44	− 1.89	1.08	0.0	11	8	5	17	SE	Henry S. Berry.
Paducah	McCracken	341	25	....	....	....	....	....	....	....	2.50	− 1.55	1.00	0.0	6	....	....	....	....	S. A. Fowler.
Central Section.																				
Alpha	Clinton	....	20	58.5	+ 1.2	87	28	28	9†	45	3.36	− 1.91	1.35	T.	5	11	8	11	S	W. W. Hicks.
Anchorage	Jefferson	700	13	53.8	+ 1.1	84	18†	22	9†	43	2.20	− 1.74	0.47	0.0	10	15	7	8	SW	C. E. Barret.
Bardstown	Nelson	637	17	56.9	+ 2.5	87	17†	24	9†	45	3.52	− 0.36	1.52	0.0	9	12	9	9	SE	Thos. S. Talbott.
Bowling Green	Warren	500	25	57.6	− 0.3	90	17	22	9	50	5.90	+ 2.13	2.25	0.0	7	14	10	6	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	....	....	....	....	....	....	....	5.42	+ 1.47	1.05	0.0	12	....	....	....	....	K. W. Massey.
Cloverport	Breckenridge	....	0	....	....	....	....	....	....	....	2.88	....	0.78	0.0	12	....	....	....	....	J. B. Randall.
Edmonton	Metcalfe	600	23	57.0	+ 1.2	86	27†	23	9†	43	5.32	+ 1.22	1.52	0.0	13	15	5	10	N	Miss Lee Ray.
Eubank	Pulaski	1177	20	54.6	+ 0.8	85	27	21	10	51	3.36	− 0.69	0.82	0.0	11	12	3	15	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	....	....	....	....	25	9	....	4.16	+ 0.99	1.46	0.0	9	12	6	12	S	Geo. L. Barnes
Franklin	Simpson	691	20	59.6	+ 0.5	88	17	25	9	38	4.38	− 0.23	1.30	0.0	8	2	26	2	NW	J. E. Newman.
Greensburg	Green	581	22	51.2	− 3.8	86	17	24	10	43	4.61	+ 0.95	0.76	0.0	14	7	3	20	NW	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	....	....	....	....	....	....	....	2.18	− 2.07	0.67	0.0	10	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	....	16	56.3	+ 1.2	83	17†	22	9	39	2.69	− 1.62	0.53	0.0	8	12	3	15	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	55.6	+ 0.6	84	17†	22	9	42	3.36	− 0.96	1.18	0.0	7	8	15	7	SW	John E. Stone.
Lexington	Fayette	989	26	53.7	0.0	83	27	23	9	33	2.23	− 1.11	0.65	T.	8	8	9	13	SE	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	56.2	+ 1.3	84	18	20	10	44	4.39	+ 0.68	1.34	0.0	18	9	9	12	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	55.7	− 0.5	83	17	25	9	35	2.13	− 1.94	0.41	T.	10	6	11	13	N	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	....	4	57.0	....	84	18†	25	9	45	2.83	....	0.57	0.0	10	5	16	9	NW	Wm. I. Hunt.
St. John	Hardin	777	18	54.2	− 0.4	83	17†	22	9†	50	2.98	− 1.01	0.84	0.0	12	12	6	12	......	Sisters of Loretto.
Scott	Kenton	....	16	54.8	+ 2.1	87	27	23	9	37	2.99	− 0.24	0.76	T.	10	7	8	15	NW	E. B. Wilson.
Shelby City	Boyle	1087	20	56.6	+ 2.1	84	18†	23	10	45	4.29	+ 0.58	0.93	0.0	11	14	7	9	SW	H. F. Ewing.
Shelbyville	Shelby	759	25	53.8	− 1.1	84	18†	23	9	44	3.27	+ 0.24	0.65	0.0	8	12	7	11	W	C. R. Burnett.
Taylorsville	Spencer	489	12	55.3	+ 1.1	83	18†	24	9	42	2.79	− 2.44	0.62	0.0	12	6	9	15	SW	E. D. Bourne.
Williamstown	Grant	943	11	52.6	+ 1.0	84	27	21	9	47	1.83	− 1.61	0.55	0.0	9	11	9	10	......	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	52.1	− 1.3	91	28	13	10	57	3.40	− 1.62	0.86	T.	10	12	11	7	W	G. W. Cann.
Berea	Madison	1070	13	56.6	+ 2.1	86	28	22	10	40	3.17	− 0.42	0.75	0.0	13	17	7	6	SW	C. F. Rumold.
Catlettsburg	Boyd	534	25	....	....	....	....	....	....	....	4.46	+ 1.00	1.46	T.	12	....	....	....	....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	....	....	....	....	....	....	....	3.10	− 0.13	1.16	0.0	9	11	1	18	S	J. V. Oldham.
Farmers	Rowan	668	8	54.7	+ 0.3	90	27	21	10	46	3.19	+ 1.31	0.78	0.0	9	16	9	5	......	Lee Craycraft.
Hazard	Perry	....	0	....	....	....	....	....	....	....	5.04	....	1.60	0.0	9	....	....	....	....	Kelley E. Watts.
Jackson	Breathitt	....	4	....	....	....	....	....	....	....	4.50	....	1.20	0.0	8	....	....	....	....	H. R. Lafon.
London	Laurel	....	0	....	....	....	....	....	....	....	3.93	....	1.00	0.0	10	15	1	14	W	C. R. Lee.
Louisa	Lawrence	....	2	....	....	....	....	....	....	....	3.99	....	0.94	0.0	9	....	....	....	....	Lucien S. Johnson.
Manchester	Clay	....	3	....	....	....	....	....	....	....	4.37	....	1.58	0.0	7	....	....	....	....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	53.6	+ 0.3	90	27	24	9†	44	2.87	− 0.63	0.83	0.0	10	14	3	13	SW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	57.2	+ 1.0	86	27	24	10	44	6.23	+ 1.92	2.40	0.0	10	19	6	5	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	54.4	+ 1.0	87	27	24	9	40	2.63	− 1.02	0.70	T.	10	18	5	7	S	H. Clay McKee.
Pikeville	Pike	....	6	....	....	....	....	....	....	....	4.16	....	1.20	0.0	9	....	....	....	....	I. M. Williams.
Richmond	Madison	926	22	56.4	+ 1.2	86	28	25	9	30	3.45	+ 0.22	0.84	0.0	10	12	1	17	SW	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	0	57.3	....	90	28	25	10	43	4.38	....	1.50	0.0	5	17	3	10	......	O. A. Lund.
Williamsburg	Whitley	939	18	56.8	+ 1.4	89	28	24	10	46	5.58	+ 1.18	1.90	0.0	13	9	5	16	W	N. C. Jones.
State averages and extremes				55.7	....	91	28	13	10	57	3.62	....	2.40	T.	10	11	8	11	SW	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for April, 1914.

Stations		Day of month																															[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
aver Dam	G	.20	.05						.18				.45		.11	.80				.39	.03						[illegible]			[illegible]			[illegible]
andville	M			.03				.54	T.			.38			1.07	.04				.53						.17	T	[illegible]	[illegible]				[illegible]
lhoun	G	.17	T					.19	.13			.40			1.06	.16		.01		.17	.01				T.	.15	.43	.01	T	.19			[illegible]
rlington	G	.05							.28				.39		T.	1.09				.10	.02						.23	T		.48			[illegible]
pkinsville	C	.10		T					.20				.60		.75	.72				.40							1.15			[illegible]			[illegible]
ensboro	O	.20	.05					.02	.20				.33		.07	1.08				.18	.02						.16	T.		.13			2.44
ducah	O	T.		T				T	.40				.40			1.00				T.						T	.25	.30	.15				2.50
Central Section.																																	
pha	C	T.						1.00	T.			.16			1.35	T.	T.			.65	.20					T.				T.	T.		3.36
eLorange	O	.25						.12	.06				.43		.23	.12				.25						.47		.07		.20			2.20
rdstown	S	.10	.08						.25				.36			.53	.03			.42							1.52			.23			3.52
wling Green	G	.37							.40				.48		.25	.62				.15							2.25			.48	.90		5.90
rnside	C	.90	.30						1.05	.05			.21		.08	.90	T.		T		.40	T.				T.	.25		.03	.45	.80		5.42
verport	O	.18	.05						.23				.39			.78	.02	.05		.64	.06					.04	.32		T.	.12			2.88
monton	G	.21						.21	.35			.22			.72	.05		.15		1.52	.05			.78		.15	.11		.80				5.32
dbank	C	.39	.22						.45				.18			.82	.03	.05			.65						.35			.10	.12		3.36
ankfort	K	.38	.05					T	.20				.32	.94		.23	T.	T.		.50	T.					T.	1.46		T.	.08			4.16
anklin	G	.25						T	.46			.35			1.21	.15				.31	T					1.30				.33			4.38
eensburg	G	.23	.07						.45				.25		.23	.47	.04	.06		.72	.37						.76		.29	.64	.03		4.61
gh Bridge	K	.13	.12						.13				.20			.21	.01				.53						.67		.05	.13			2.18
ington	O	.25						.25				.52			.32	.10		T.		.44	T.					.53		T.		.28			2.69
tchfield	G	.20						.17				.58			.63					.25	T.					1.18			.35				3.36
xington ***	K	.35	T.					.13	.07			.27			.10	T.	T.	T.		.52	T.				T.	.65			T	.14			2.23
retto	S	.25	T.	T.	T.			.05	.10	.02	T.	.28	.12	.02	.50	.24	.26	.01		.50	.03	.02				1.34	.30		.03	.32			4.39
uisville***	O	.24	T.					.14	T.			.41			.30	.10	T.	.01		.13					T.	.34		.22	.24				2.13
Do. (Cherokee Park)	O	.40						.13				.43				.44	T.	.03		.18					T.	.57	.12	.37		.11			2.83
John	S	.30	.06						.12				.47		T.	.50	.05	.08		.14	.05						.34	T.	.16	.21			2.98
ott	L	.66	.03	T.			T.	.20	.19	T.		.34			T.	.20	T.			.34	T.				.16	.76	.11						2.99
elby City	K	.45						.59	.22			.27			.35	.17				.81	T.					.93	.15	.10		.25			4.29
elbyville	S	.15	.65					T.	.65				.45			.33				.40	T.						.47			.17			3.27
ylorsville	S	.36						.12	.11			.41	.01		.22	.04	T.	.03		.46	T.					.62		.08	T.	.33			2.79
lliamstown	L	.28	.04						.23				.31			.10				.26	.02					T.	.55			.04			1.83
Eastern Section.																																	
attyville‖	K	.50	.10						.80	T.			.16			.50	.02	.04			.86						.40			.02			3.40
rea	K	.75						.52	.12			.08	.02		.44	.08	.10		.05	.47	.12					.12				.30			3.17
tlettsburg‖	B	.32	.64	T.					.60	.12			.10			.14	.20			.02	.80	.02					1.46			.04	T.		4.46
lmouth‖	L	.61	.08					T.	.48				.28			.06				.28	.10						1.16			.05			3.10
rmers	L	.78					.50	.40					.25			.20				.20	.06					.55	.25						3.19
azard‖	K	.66	.21						1.60	.08			.36			.71		.06		1.31	.05												5.04
ckson‖	K	.20	.40						1.00	T.			.20			.60	.10	T.			1.20						.80			T.	T.		4.50
ndon	C	.28	.35						.64	.06			.21			.82		.20			1.00						.22				.15		3.93
uisa‖	B	.35	.20						.60	T.			.09			.23	.56				.94						.92			.10	T.		3.99
anchester	K		.30						.98	.13						.90	.22				1.58						.26						4.37
aysville‖	O	.42	.27						.62				.27			.13	.01			T.	.24						.83	.06		.02			2.87
ddlesboro	C	.30						.17	2.40			.34			.80	.78	.10			.86	.32									.16			6.23
ount Sterling‖	L	.12	.20						.37	T.			.35			.15	.15	.04			.40						.76			.15			2.63
ikeville‖	B	.10	.30						1.20	.10			.20			.36	.50	.30			1.10	T.					T.				T.		4.16
ichmond‖	K	.18	.35						.52	.03			.37			.30		.05			.63	T.					.84			.18	T.		3.45
eeksbury	B	.38							1.50						1.20	.10				1.20													4.38
illiamsburg‖	C	.33	.24						1.90	.05			.18		.43	.75	.06	.03	.12		1.42	T.								.04	.03		5.58

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

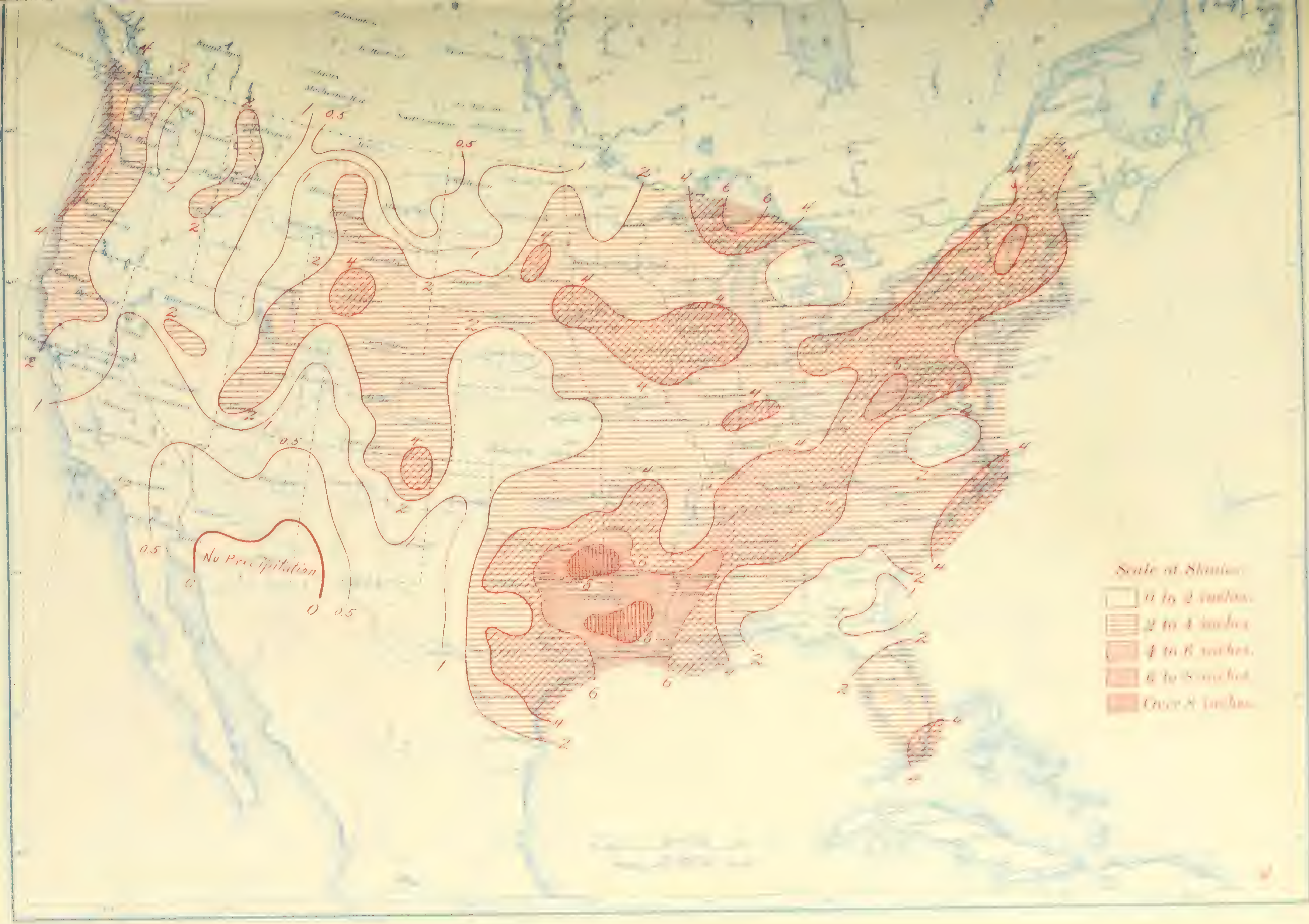
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for April, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western section.																																	
Beaver Dam *	Maximum	64	63	54	55	57	73	65	39	44	58	51	60	68	51	62	78	86	81	68	54	77	83	84	80	75	80	84	87	71	65	..	67.2
	Minimum	60	50	43	30	38	37	55	32	24	24	40	52	32	48	48	42	56	62	54	32	33	48	54	56	67	61	62	60	64	52	..	46.5
Blandville	Maximum	69	67	57	56	61	70	64	41	46	55	49	57	66	58	70	80	84	74	68	55	74	79	77	81	74	80	79	72	71	62	..	66.5
	Minimum	56	49	43	35	41	43	41	30	24	31	43	33	38	49	48	53	65	58	48	38	41	55	61	61	63	63	65	67	59	49	..	48.3
Calhoun	Maximum	65	65	62	55	59	72	71	44	48	55	55	62	70	64	67	80	85	81	71	57	74	81	82	83	81	83	83	81	77	70	..	69.4
	Minimum	58	49	43	33	39	39	44	31	24	26	44	32	39	48	48	46	59	67	55	36	35	54	57	59	66	62	63	64	64	52	..	47.9
Earlington *	Maximum	66	65	56	54	75	60	64	38	46	58	50	61	70	53	68	81	87	83	70	48	78	86	85	84	73	85	81	81	76	63	..	68.3
	Minimum	55	51	45	32	32	47	35	32	22	23	32	32	31	35	47	43	51	63	55	36	35	37	60	65	67	63	62	63	65	53	..	45.6
Hopkinsville	Maximum	67	67	59	58	63	76	67	41	48	61	60	63	70	56	68	83	89	81	66	40	69	83	80	75	66	66	63	79	81	62	..	66.9
	Minimum	59	49	46	33	34	38	40	32	24	24	28	34	34	39	46	43	49	59	54	38	35	36	47	55	56	59	62	60	62	52	..	44.2
Owensboro *	Maximum	64	62	51	49	55	69	59	38	44	54	46	58	68	51	65	75	84	79	66	44	70	80	77	78	79	81	80	78	71	59	..	64.5
	Minimum	51	49	42	34	40	38	46	31	25	27	32	34	36	45	48	45	56	60	49	36	33	42	58	58	62	60	64	63	63	53	..	46.0
Central Section																																	
Alpha	Maximum	64	61	56	57	56	67	68	61	45	50	59	60	67	54	52	69	80	83	70	60	69	78	81	82	81	83	84	87	75	69	..	67.6
	Minimum	61	50	46	33	38	32	61	34	28	28	49	44	34	49	49	51	52	70	60	41	33	43	53	60	68	65	60	70	65	54	..	49.4
Anchorage	Maximum	62	59	51	48	52	70	65	42	45	55	50	60	65	56	54	74	78	84	72	47	70	82	72	81	76	82	83	84	78	61	..	65.3
	Minimum	56	45	35	27	35	32	42	29	22	22	30	29	32	47	44	36	47	54	47	37	27	43	53	53	62	62	59	58	58	47	..	42.3
Bardstown *	Maximum	68	61	54	55	56	73	75	44	50	59	65	62	70	55	55	74	87	74	70	44	75	85	79	78	81	85	87	86	84	62	..	68.4
	Minimum	54	50	39	32	37	33	44	33	24	25	33	33	32	43	48	42	54	60	57	37	30	44	55	59	66	62	61	61	65	50	..	45.4
Bowling Green*	Maximum	67	67	62	60	64	75	75	43	51	61	54	65	74	55	62	80	90	85	71	44	78	87	86	86	82	87	88	83	82	70	..	71.1
	Minimum	54	49	44	29	36	32	32	32	22	28	28	35	34	45	45	45	53	62	53	37	28	45	49	56	62	57	61	57	57	49	..	44.2
Edmonton	Maximum	67	62	56	57	57	70	65	59	45	57	50	60	68	60	67	73	85	84	75	57	72	82	82	82	81	84	86	86	82	70	..	69.4
	Minimum	58	50	42	40	36	36	50	30	23	23	46	40	30	40	47	40	47	62	47	40	29	41	52	52	62	59	63	55	55	52	..	44.6
Eubank *	Maximum	64	58	52	54	55	69	70	67	43	55	59	58	69	62	55	67	78	84	65	58	69	81	83	81	81	82	85	85	78	73	..	68.0
	Minimum	51	48	38	28	28	28	29	36	24	21	24	39	31	35	48	47	45	52	56	39	29	30	42	54	58	61	55	57	57	45	..	41.2
Frankfort	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	55	47	39	33	40	30	52	32	25	26	41	33	34	48	49	40	48	53	56	37	33	42	54	57	65	61	57	56	59	52	..	45.1
Franklin	Maximum	69	66	58	60	64	71	72	62	50	59	54	63	68	62	69	79	88	83	71	63	72	87	82	85	81	81	84	81	80	67	..	71.0
	Minimum	57	50	44	33	33	39	58	30	25	28	42	40	38	48	47	49	60	63	54	39	34	53	58	61	63	61	65	62	63	51	..	48.3
Greensburg*	Maximum	67	61	61	55	58	72	70	41	57	59	58	62	70	56	56	72	86	85	65	42	73	81	84	84	80	84	85	85	79	63	..	68.4
	Minimum	57	50	42	30	55	30	40	36	26	24	34	39	31	39	46	39	46	49	55	40	30	38	48	56	58	58	57	56	62	52	..	44.1
Irvington	Maximum	66	61	54	50	53	70	66	48	44	54	52	59	65	59	60	72	83	81	75	53	71	81	77	81	79	83	82	82	75	65	..	66.7
	Minimum	53	45	39	34	35	42	48	30	22	24	40	32	33	47	48	45	53	62	53	35	32	51	55	55	66	60	60	63	65	50	..	45 9
Leitchfield	Maximum	67	61	55	53	55	70	65	45	44	54	50	59	66	55	59	72	84	81	70	54	71	81	76	82	79	80	84	81	78	63	..	66.5
	Minimum	55	47	41	34	35	33	45	30	22	23	37	34	34	46	47	41	52	60	54	35	29	46	55	54	60	59	61	60	63	50	..	44.7
Lexington	Maximum	64	54	49	46	48	67	68	39	40	52	57	55	63	59	55	66	76	82	67	45	65	78	72	80	76	78	83	82	76	54	..	63.2
	Minimum	49	45	33	32	36	34	39	27	23	28	38	35	41	46	48	43	52	60	45	36	34	50	53	58	61	60	63	63	53	41	..	44.2
Loretto	Maximum	67	60	59	52	53	70	68	57	45	55	56	59	66	60	56	73	82	84	78	68	69	81	77	81	79	82	83	82	78	75	..	68.5
	Minimum	56	47	39	27	35	26	51	30	23	20	41	34	28	45	47	43	47	63	54	37	27	43	50	56	61	60	56	61	63	50	..	44.0
Louisville	Maximum	65	60	52	49	51	70	62	39	15	53	50	60	66	54	56	72	83	83	71	44	70	81	72	81	74	81	83	82	77	58	..	64.8
	Minimum	52	47	37	35	39	37	39	28	25	30	41	35	42	48	48	50	56	66	44	37	35	57	55	60	63	62	64	66	54	46	..	46.6
Do (Cherokee Park)	Maximum	68	61	57	48	51	72	67	58	45	59	54	61	65	64	55	74	82	84	75	62	75	82	76	82	75	84	83	84	77	69	..	68.3
	Minimum	55	47	40	31	37	33	51	33	25	26	42	32	34	48	48	40	55	60	54	38	30	40	54	55	65	62	59	61	64	50	..	45.6
St. John *	Maximum	66	64	53	53	54	70	64	42	41	54	55	60	65	54	58	75	83	81	68	43	70	82	75	83	78	80	80	80	80	60	..	65 7
	Minimum	54	48	40	32	31	32	41	33	22	22	28	34	35	38	46	40	47	53	54	35	28	32	53	55	60	60	60	59	64	48	..	42 8
Scott	Maximum	60	58	50	48	49	68	62	55	45	54	50	62	71	60	52	70	79	84	75	58	67	85	73	82	72	76	87	83	78	63	..	65.9
	Minimum	53	44	35	32	35	31	48	27	23	26	40	30	36	45	46	40	47	55	54	37	31	49	47	53	59	58	58	63	63	46	..	43 7
Shelby City	Maximum	63	59	54	55	53	72	70	57	45	59	58	62	66	60	55	71	80	84	78	59	75	82	76	84	80	80	82	84	78	74	..	68.5
	Minimum	57	46	38	29	37	30	57	31	24	23	38	36	33	47	47	45	45	54	55	36	30	43	51	58	62	59	57	60	63	48	..	44 6
Shelbyville *	Maximum	66	58	52	48	53	69	54	41	46	59	59	60	67	54	53	72	78	84	67	42	68	82	76	80	75	82	84	83	79	59	..	65 0
	Minimum	58	46	37	30	36	32	38	34	23	24	28	30	33	40	47	35	39	55	55	36	29	38	52	54	56	58	59	61	63	49	..	42.5
Taylorsville	Maximum	68	59	55	49	51	69	65	56	43	55	56	57	64	59	54	70	78	83	73	60	68	81	73	81	78	88	83	83	79	66	..	66.5
	Minimum	53	47	39	30	37	30	52	31	24	25	37	31	32	58	50	36	47	52	56	37	30	39	52	55	62	61	57	59	65	50	..	44.1
Williamstown *	Maximum	66	55	48	52	51	68	64	39	46	53	52	60	67	54	52	69	77	83	65	40	66	81	71	83	75	80	84	83	80	56	..	64.0
	Minimum	47	44	35	32	32	31	33	32	21	25	28	29	34	43	46	40	40	52	54	37	30	34	45	49	55	58	61	64	63	46	..	41.3
Eastern Section.																																	
Beattyville *	Maximum	66	57	60	60	58	75	75	37	47	59	65	66	73	60	58	70	84	89	73	45	72	86	86	86	83	85	90	91	82	69	..	70.1
	Minimum	46	42	28	19	26	19	22	29	20	13	21	30	22	33	38	34	32	39	48	37	31	29	34	44	42	52	45	48	58	42	..	34.1
Berea	Maximum	65	59	56	52	50	70	58	52	42	56	51	58	61	58	58	68	81	85	76	56	70	82	77	83	80	81	83	86	83	67	..	66.8
	Minimum	57	47	39	27	34	30	52	30	25	22	36	38	30	48	49	44	64	75	56	36	32	48	51	59	56	56	71	69	60	47	..	46.3
Farmers	Maximum	67	60	62	53	54	75	58	57	45	57	62	60	67	60	60	66	80	87	82	78	53	65	81	70	83	81	90	89	84	58	..	67.5
	Minimum	56	47	40	34	34	41	31	40	26	21	28	28	29	46	47	40	37	50	52	40	45	45	35	25	67	61	53	57	58	43	..	41.9
Maysville*	Maximum	69	54	47	50	51	70	69	37	46	57	57	61	70	59	55	67	83	87	67	44	68	85	76	87	81	77	90	89	81	55	..	66.3
	Minimum	49	45	38	34	35	27	29	34	24	24	27	33	31	34	45	41	39	45	47	42	37	38	50	50	54	59	55	55	60	50	..	41.0
Middlesboro	Maximum	67	62	58	61	59	69	71	60	46	56	65	63	72	66	58	69	72	82	77	53	69	82	84	81	84	84	86	84	80	70	..	69.7
	Minimum	54	50	40	29	38	30	42	34	28	24	38	44	30	50	50	40	42	49	52	41	38	38	47	64	63	53	55	60	63	54	..	44.7
Mount Sterling*	Maximum	65	56	47	49	51	67	71	36	44	55	58	58	56	59	57	66	77	83	67	43	70	79	75	82	78	81	87	81	81	56	..	64.5
	Minimum	50	48	38	31	35	30	37	35	24	25	26	38	31	47	48	43	46	52	65	42	37	39	52	54	58	61	58	62	65	49	..	44 3
Richmond *	Maximum	64	57	57	52	52	69	60	47	44	55	59	59	69	62	57	68	80	85	64	42	69	80	78	83	82	81	84	86	76	58	..	66.0
	Minimum	58	48	38	30	38	34	55	47	25	26	39	36	36	48	47	39	44	62	64	41	34	49	55	55	60	61	61	64	64	48	..	46 9
Weeksbury	Maximum	67	60	54	65	70	74	70	65	50	56	67	59	67	63	58	66	76	86	73	69	66	84	79	84	82	83	89	90	82	71	..	70 8
	Minimum	54	48	40	42	40	36	34	28	28	25	34	42	32	45	47	48	41	50	45	39	32	41	49	51	74	58	54	57	66	54	..	43 8
Williamsburg *	Maximum	70	60	56	62	58	72	73	40	45	64	64	68	75	67	54	70	77	85	80	45	73	84	85	87	88	87	85	89	77	68	..	70 3
	Minimum	54	50	42	29	33	30	38	38	28	24	34	35	31	38	50	45	45	51	46	44	33	38	47	54	61	56	54	53	64	54	..	43.3

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Precipitation
0
0.5
1
2
4
6
8

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CLIMATOLOGICAL DATA

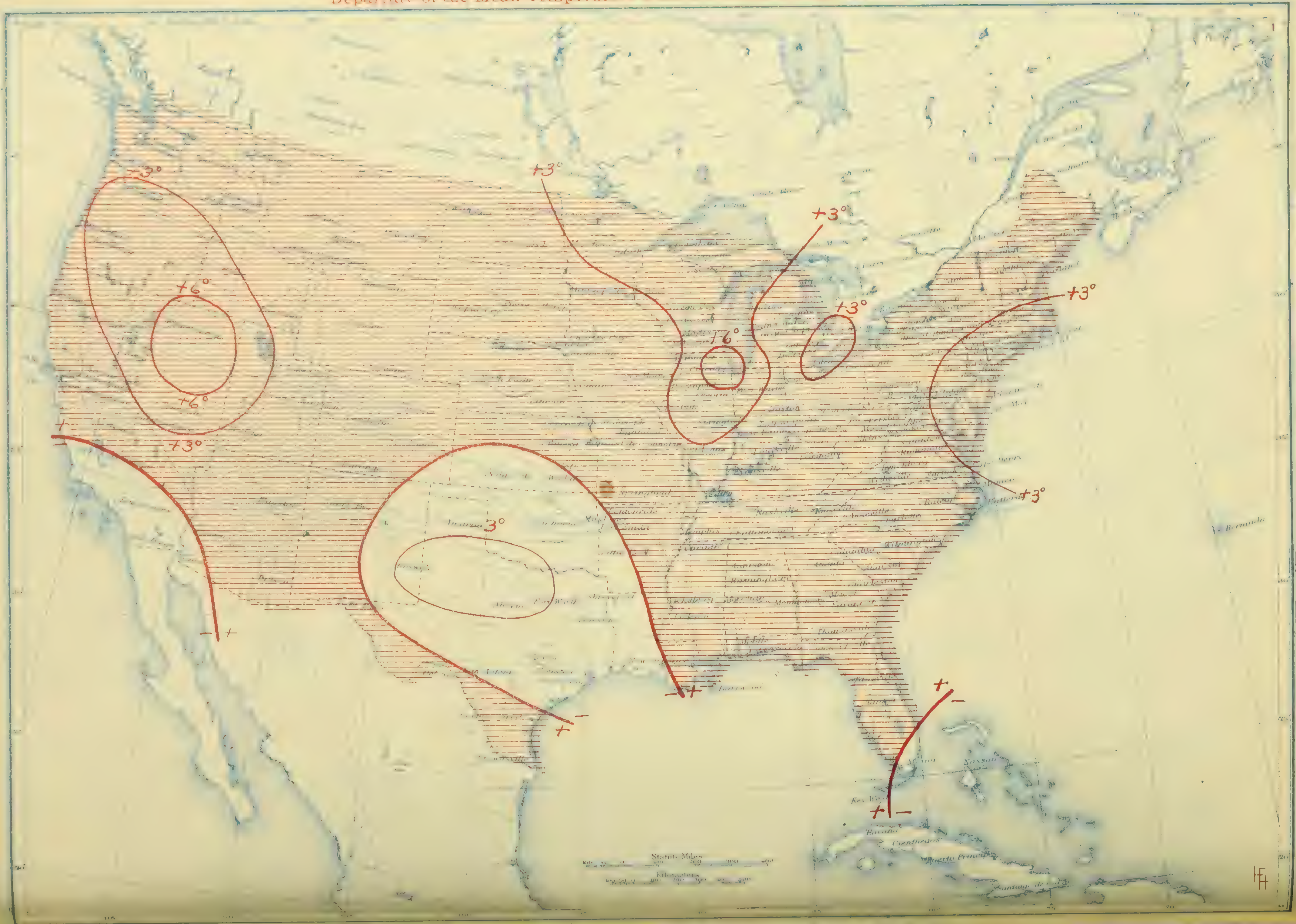
KENTUCKY SECTION

MAY, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 20, 1914

Departure of the Mean Temperature from the Normal, May, 1914.



. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

. XIX. LOUISVILLE, KY., MAY, 1914. No. 5

GENERAL SUMMARY.

he month of May, 1914, was characterized by extremes of perature and precipitation. Except for a few days, unonably cold weather prevailed during the first two decades. minimum temperatures only a few degrees above freezing several days and light frosts at several stations on the 1st, and 15th. The low temperatures retarded the growth of tation and the germination of seeds. The last decade was sually warm, with maximum temperatures 90° or above on t days, and vegetation made rapid progress where moisture sufficient.

he heavy rains of the first week delayed farm work in many lities. During the last three weeks practically no rain rred, and droughty conditions were becoming serious at the of the month. The preparation of the soil, the setting of cco and late planting of corn were delayed, and it is estimathat the strawberry crop was reduced one-half by the drought.

PRESSURE.

wo well-defined low pressure areas passed over the State dur the month, one on the 5th attended by heavy rains and the er on the 12th accompanied by very little rainfall. From 13th to the end of the month high pressure areas conously dominated weather conditions.

he mean sea level pressure, computed from two stations, was 14 inches. The highest was 30.52 inches at Louisville and ington on the 19th, and the lowest 29.61 inches at Lexington the 5th.

TEMPERATURE.

uring the periods 1st-3d, 8th-10th and 14th-17th, minimum peratures ranging between 32° and 45° were registered genly over the State. The lowest temperature for the State, , was registered at Greensburg on the 1st, and the highest, °, at Beaver Dam on the 28th, giving a monthly range of . The monthly mean for the State, determined from the ords of 35 stations, was 66.5°, the average daily excess being . The highest mean for the State was 68.6° at Frankfort the lowest 63.7° at Farmers. The maximum temperature this month has been exceeded only twice before since State ords were established, viz, in 1896, 106°, and in 1911, 105°.

HUMIDITY.

t Louisville, the average relative humidity at 7 a. m. was 68 cent and at 7 p. m. 53 per cent.

PRECIPITATION.

recipitation, ranging between 1 and 2 inches over the northtral and western counties, and those bordering on Virginia, between 2 and 5 inches over the rest of the State, was deent in all sections.

rom the reports of 48 stations, the average amount for the nth was 2.16 inches, which is 1.76 inches less than the nthly normal and the least on record for May except in 1891, en it was 1.78 inches. Practically all of the precipitation urred in the period 4th-9th, and in many localities most of monthly amount was included in the heavy rains of the 5th. The amounts at the various stations ranged between [illegible] inch at Louisville and 4.65 inches at Bowling Green. There was an average of 5 days with .01 inch or more of precipitation.

The extent of the accumulated deficiency for the months January to May 1914, inclusive, is illustrated by the following examples: Bardstown, 6.16 inches; Beaver Dam, 7.02 inches; Earlington, 7.84 inches; Leitchfield, 8.85 inches; Lexington, 6.15 inches; Louisville, 6.28 inches; Mt. Sterling, 6.77 inches; Paducah, 7.54 inches; St. John, 10.22 inches; Williamstown, 7.03 inches.

WIND.

The average hourly wind velocity at Louisville was 10.4 miles and at Lexington 9.2 miles, the total movement being 7719 miles and 6858 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 60 miles per hour from the west, and at Lexington 42 miles per hour from the northwest, both on the 7th.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 75 and at Lexington 71. The average number of clear days for the State was 20, partly cloudy 6, and cloudy 5.

MISCELLANEOUS.

May 4.---Two houses were wrecked and two people hurt by a storm near Glasgow.

May 7.---A barn was burned by lightning near Alzey, Henderson county; estimated loss $2,000. A hailstorm caused considerable damage in Henry County. Plate glass windows were shattered and trees uprooted by a windstorm at Louisville, and J. Estill Taylor was killed in an automobile accident that resulted from the blinding rain during this storm.

May 8.---Miss Nellie Shaw was killed and her father, S. M. Shaw, fatally injured by lighting, near Leslie, Cumberland County.

The rivers of the State were at good stages during the first week, but after that there was a steady decline until at the end of the month streams were unusually low for the time of year.

ERRATA.—April, 1914: Bowling Green—number of days with .01 inch or more precipitation should be 9; Greensburg, mean temperature should be 56.2 and departure +1.2.

Comparative data for May.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25 year normal.	Highest.	Lowest.	Monthly average.	Departure from 25 year normal.
1889	63.6	−2.1	94	28	4.03	+0.11
1890	63.9	−1.8	93	32	4.22	+0.30
1891	62.6	−3.1	90	29	1.78	−2.14
1892	64.6	−1.1	90	36	5.49	+1.57
1893	63.2	−2.5	96	37	5.59	+1.67
1894	64.5	−1.2	99	32	3.54	−0.38
1895	63.9	−1.8	99	29	3.16	−0.76
1896	72.2	+6.5	106	42	5.34	+1.42
1897	61.4	−4.3	92	32	3.27	−0.65
1898	67.6	+1.9	93	31	4.52	+0.60
1899	68.8	+3.1	94	42	4.79	+0.87
1900	66.3	+0.6	96	29	3.49	−0.43
1901	63.7	−2.0	97	34	2.65	−1.27
1902	70.0	+4.3	93	35	3.55	−0.37
1903	68.0	+2.3	98	29	3.09	−0.83
1904	[illegible]	[illegible]	[illegible]	33	3.05	−0.87
1905	68.0	+2.3	95	38	5.23	+1.31
1906	69.5	+3.8	95	31	2.54	−1.38
1907	61.3	−4.4	93	30	5.07	+1.15
1908	66.7	+1.0	96	28	4.34	+0.42
1909	63.9	−1.8	[illegible]	27	4.64	+0.72
1910	61.1	−4.6	[illegible]	[illegible]	4.81	+0.89
1911	69.4	+3.7	105	29	2.46	−1.46
1912	66.7	+1.0	97	[illegible]	4.53	+0.61
1913	66.1	+0.4	99	29	2.92	−1.00
1914	66.5	+0.8	103	32	2.16	−1.76

Climatological data for May, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	68.0	+ 2.0	103	28	38	14	43	1.71	– 2.16	1.10	0.0	4	23	1	7	S	W. T. Austin.
Blandville	Ballard	445	32	67.8	+ 1.3	90	26†	42	1	28	1.27	– 3.26	1.11	0.0	3	18	10	3	S	E. W. Horr.
Calhoun	McLean	393	11	67.8	+ 0.6	94	27†	40	14	35	1.40	– 1.97	0.82	0.0	4	10	19	2	S	W. A. Taylor.
Earlington	Hopkins	370	24	68.4	+ 1.6	98	27	39	15	43	2.78	– 2.23	2.34	0.0	4	23	2	6	S	Brick Southworth.
Hopkinsville	Christian	524	18	67.4	0.0	98	28	37	14	40	1.68	– 2.69	1.00	0.0	5	20	2	9	E	W. F. Randle.
Owensboro	Daviess	479	17	66.3	+ 0.1	92	26†	39	14	33	1.07	– 2.82	0.77	0.0	4	12	12	7	SE	Henry S. Berry.
Paducah	McCracken	341	25								1.45	– 2.52	1.00	0.0	2					S. A. Fowler.
Central Section.																				
Alpha	Clinton		20	66.0	– 0.6	92	29	40	2†	40	2.90	– 0.98	2.30	0.0	3	27	0	4	S	W. W. Hicks.
Anchorage	Jefferson	700	13	65.2a	+ 1.1	95a	28	35a	14	36a	1.39	– 2.58	0.40	0.0	6	24	4	3	SW	C. E. Barret.
Bardstown	Nelson	637	17	67.9	+ 1.2	98	28	40	1†	42	1.94	– 1.48	0.71	0.0	6	24	4	3	S	Thos. S. Talbott.
Bowling Green	Warren	500	25	67.8	+ 0.2	98	28	38	14	40	4.65	+ 0.57	3.85	0.0	5	20	8	3	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								3.83	– 0.24	2.09	0.0	6					K. W. Massey.
Cloverport	Breckenridge		0								1.74		0.66	0.0	5					J. B. Randall.
Edmonton	Metcalfe	600	23	66.1	+ 1.1	95	29	38	15	39	2.61	– 1.81	1.91	0.0	5	22	6	3	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	65.1	+ 0.9	94	29	36	15	38	3.71	– 0.24	2.50	0.0	5	20	4	7	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	68.6	+ 3.7	99	28†	40	1†	35	1.59	– 2.23	0.83	0.0	4	19	8	4	S	Geo. L. Barnes
Franklin	Simpson	691	20	67.8	+ 0.8	95	29	42	1	35	3.33	– 0.72	1.65	0.0	4	4	25	2	NW	J. E. Newman.
Greensburg	Green	581	22	66.2	+ 1.3	97	29	32	1	42	3.34	– 0.58	2.32	0.0	6	12	6	13	SE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11								2.45	– 1.17	2.00	0.0	4					Miss Lulu Wood.
Irvington	Breckenridge		16	66.4	– 0.2	94	28†	38	14	37	1.12	– 2.49	0.38	0.0	5	22	4	5	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	65.9	+ 0.7	92	28†	40	1†	35	1.63	– 2.75	0.77	0.0	4	20	8	3	SW	John E. Stone.
Lexington	Fayette	989	26	65.8	+ 1.5	92	28	37	1	29	1.65	– 1.87	1.20	0.0	4	14	12	5	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	65.5	– 0.1	93	28	37	15	42	1.93	– 1.85	1.02	0.0	6	20	7	4		Loretto Academy.
LOUISVILLE	Jefferson	525	42	67.8	+ 1.1	93	28	42	1	27	0.65	– 2.99	0.43	0.0	4	16	10	5	S	U. S. Weather Bureau.
Do (Cherokee Park)	Do.		4	66.8		93	28	39	14	38	0.92		0.34	0.0	5	16	11	4	SW	Wm. I. Hunt.
St John	Hardin	777	18	64.8	– 0.4	95	28†	38	14†	40	1.19	– 2.83	0.72	0.0	4	19	9	3		Sisters of Loretto.
Scott	Kenton		16	65.3	+ 0.9	94	28	36	1†	36	2.47	– 1.64	0.80	0.0	6	19	8	4	N	E. B. Wilson.
Shelby City	Boyle	1087	20	67.0	+ 2.5	98	28	37	1	42	2.71	– 1.04	2.00	0.0	4	24	3	4	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	65.5	+ 0.5	96	28	36	1†	39	1.56	– 2.45	0.85	0.0	4	20	5	6	S	C. R. Burnett.
Taylorsville	Spencer	489	12	64.6	– 0.4	94	28	37	14†	41	1.47	– 2.05	0.65	0.0	18	18	8	5	S	E. D. Bourne.
Williamstown	Grant	943	11	66.0	+ 2.6	93	28†	34	1	33	1.66	– 1.60	0.64	0.0	4	19	5	7		Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10								2.16	– 2.02	1.24	0.0	4	21	3	7	W	G. W. Cann.
Berea	Madison	1070	13	67.8	+ 2.2	96	28†	37	2	36	2.88	– 1.25	2.00	0.0	4	22	5	4	NW	C. F. Rumold.
Catlettsburg	Boyd	534	25								2.38	– 1.78	0.80	0.0	5					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								2.10	– 1.48	1.24	0.0	5	20	5	6	S	J. V. Oldham.
Farmers	Rowan	668	8	63.7		97	30	35	1†	50	4.05		1.80	0.0	6	25	3	3		Lee Craycraft.
Hazard	Perry		0								2.07		0.98	0.0	5					Kelley E. Watts.
Jackson	Breathitt		4								1.90		1.20	0.0	3	25	2	4	S	H. R. Lafon.
London	Laurel		0								2.98		2.08	0.0	7					C. R. Lee.
Louisa	Lawrence		2								2.76		1.20	0.0	6					Lucien S. Johnson.
Manchester	Clay		3								2.57		1.60	0.0	5					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	65.5	+ 0.5	100	29	35	1	46	2.24	– 1.55	0.84	0.0	6	21	2	8	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	64.9	+ 0.2	94	29	38	1†	41	1.69	– 2.52	0.92	0.0	5	24	5	2		B. H. Perkins.
Mount Sterling	Montgomery	930	24	66.8	+ 2.9	96	27†	37	1	36	2.05	– 2.00	1.07	0.0	6	22	2	7	SW	H. Clay McKee.
Pikeville	Pike		6								1.36		0.50	0.0	5					I. M. Williams.
Richmond	Madison	926	22	67.4	+ 1.9	96	28†	38	1	34	2.11	– 1.43	1.50	0.0	5	19	5	7	SW	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	66.0		95	29	38	2†	41	2.35		1.00	0.0	5	25	1	5	E	O. A. Lund.
Williamsburg	Whitley	939	18	65.8	– 0.3	96	29	37	1†	50	2.41	– 1.67	1.50	0.0	5	22	3	6	E	N. C. Jones.
State averages and extremes				66.5		103	28	32	1	50	2.16		3.85		5	20	6	5	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for May, 1914.

STATIONS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam	G				.11	1.10	.35		.15																								1.71
Blandville	M			T	.53	.58		.16																						T			1.27
Calhoun	G				.10	[illegible]	[illegible]	.11	T		T																						[illegible]
Earlington	G				.05	2.31	.33			.06																							[illegible]
Hopkinsville	C				.30	1.00	.30	.03	.05															T									[illegible]
Owensboro	O				.01	.19	.77		.10	T.																							[illegible]
Paducah	O					1.00	T		.45																								[illegible]
Central Section.																																	
Alpha	C				2.30	.30	.30		T.				T																		T		[illegible]
Anchorage	O				.40	.29		.20	.34	.05													.11										[illegible]
Bardstown‡	S				.20	.71	.05		.67	.20														.11									[illegible]
Bowling Green	G				.10	3.85	.45	.10	.15																								[illegible]
Burnside	C				.65	2.09	.05		.45	.30				.29																			[illegible]
Cloverport	O				.01	.66	.11		.65		.01																	T.					[illegible]
Edmonton	G					1.90	.15		.42	.02			.11	T.																			2.61
Eubank	C				.15	2.50	.15		.20	.40				.31																			3.71
Frankfort	K					.83	.31		.25	.20				T.										T.									1.59
Franklin	G				1.25	1.65	.31	.12	T.																								3.33
Greensburg	G				.68	2.32	.13	.01	.08	.12																							3.34
High Bridge	K				.09	2.00			.15	.21																							[illegible]
Irvington	O				.12	.38	.25	.27	.10																								1.12
Leitchfield	G				.77	.37	.37	.12																									1.63
Lexington ***	K				.81	.46	T.	.21	.17				T.	T.									T.										1.65
Loretto	S	T.			.37	1.02	.08		.32	.11	T.		.03	T.	T.																		1.93
Louisville***	O				.37	.09		.10	.09						T.								T.										0.65
Do. (Cherokee Park)	O				.31	.33	.07	.06		.12													T.										0.92
St. John	S				T	.72	.22		.21	.04																		T.					1.19
Scott	L				.77	.80	.20		.64	.04	T.		T.	.02	T.													T.					2.47
Shelby City	K				.31	2.00			.21	.19																							2.71
Shelbyville	S					.85	T		.30	.25				T.										.16									1.56
Taylorsville	S				.65	.46	T.	T.	.28	.08			T	T.									T										1.47
Williamstown	L					.53	.25		.64	.24				T.																			1.66
Eastern Section.																																	
Beattyville	K					1.24	.20		.46	.26																							2.16
Berea	K				.30	2.00				.46			.12																				2.88
Catlettsburg	B					.80	.12		.36	.64	T.			.46	T.																		2.38
Falmouth	L					1.24	.07		.38	.38				.03																			2.10
Farmers	L					1.80	.40	.48	.60	.15			.62																				4.05
Hazard	K					.98	.06		.33	.25				.45																			2.07
Jackson	K					1.20																											1.90
London	C					2.08	.10	.02	.42	.32		.02		.02																			2.98
Louisa	B					1.20	.30		.32	.51				.38																		.05	2.76
Manchester	K					1.60	.07		.30	.53			.07																				2.57
Maysville	O					.74	.84	.02	.25	.35				.04	T.																		2.24
Middlesboro	C				.28	.92			.21	.16				.12																			1.69
Mount Sterling	L				.10	1.07	.05		.18	.22				.43	T.																		2.05
Pikeville	B					.40	.30	T.	.10	.50				.06																			1.36
Richmond	K					1.50	.04		.17	.20				.20																			2.11
Weeksbury	B				.40	1.00			.30	.50				.15																			2.35
Williamsburg	C				T.	1.50	.06		.18	.47		T.		.20																		T	2.41

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for May, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	71	73	84	71	83	77	80	57	79	87	92	79	54	72	77	78	75	85	86	89	90	85	94	95	95	94	97	‡	93	96	93	83.4
	Minimum	41	41	41	55	60	59	55	46	48	50	60	67	48	38	40	41	45	44	51	48	49	52	54	54	61	65	68	64	62	65	62	52.7
Blandville	Maximum	66	71	74	70	80	73	75	62	71	81	86	76	58	69	72	73	73	78	77	81	82	85	85	87	87	90	89	89	90	90	90	78.4
	Minimum	42	49	55	63	62	60	57	47	45	55	64	51	45	43	50	49	53	53	57	54	54	58	63	65	66	70	70	68	68	70	66	57.2
Calhoun	Maximum	69	71	80	73	81	78	77	60	72	81	89	81	58	70	75	76	78	81	83	84	86	86	85	91	91	93	94	94	93	93	94	81.2
	Minimum	41	45	49	64	62	59	54	46	48	53	63	58	48	40	41	43	49	48	53	49	51	54	56	58	63	67	68	64	65	69	63	54.5
Earlington *	Maximum	70	74	83	72	82	74	59	80	75	84	91	80	56	71	71	80	84	86	86	88	90	87	88	95	94	96	98	97	97	93	94	83.1
	Minimum	40	42	45	60	62	60	55	47	46	52	61	70	47	40	39	40	47	47	51	47	47	55	54	53	65	71	69	65	63	67	62	53.8
Hopkinsville	Maximum	74	67	73	67	82	75	79	70	74	86	91	81	60	70	75	79	78	84	83	86	88	88	89	94	94	94	96	98	98	93	95	82.6
	Minimum	42	44	47	52	52	57	54	41	44	47	56	64	47	37	39	41	44	49	54	46	49	52	55	57	58	64	66	64	63	66	64	52.1
Owensboro *	Maximum	63	68	78	74	78	70	74	57	69	80	87	73	56	58	70	63	75	79	80	82	83	82	84	89	91	92	92	92	92	89	90	77.7
	Minimum	43	44	55	55	61	60	54	46	46	53	60	67	47	39	41	49	50	52	52	49	51	54	58	58	63	68	70	64	65	65	62	54.9
Central Section																																	
Alpha	Maximum	67	70	80	65	70	70	72	56	69	75	85	83	70	66	67	70	72	77	77	77	80	31	81	85	90	87	89	90	92	86	84	76.9
	Minimum	41	40	40	63	63	62	56	48	50	59	70	70	56	50	44	41	46	47	49	49	50	52	59	55	51	75	75	65	60	62	64	55.2
Anchorage	Maximum	66	64	79	75	77	74	76	56	72	79	87	77	60	66	72	72	73	80	82	84	..	80	81	89	92	92	93	95	94	91	90	78.9
	Minimum	38	42	56	60	58	56	48	44	45	45	62	60	44	35	37	44	44	47	46	48	..	50	51	53	59	65	65	60	65	63	58	51.6
Bardstown *	Maximum	69	72	82	71	79	75	78	59	74	82	88	81	54	69	75	72	80	86	87	89	88	85	87	93	95	94	97	98	96	94	92	82.1
	Minimum	40	41	47	56	60	60	52	45	47	48	61	68	49	43	40	49	47	44	49	49	51	54	55	55	64	65	68	65	66	65	62	53.7
Bowling Green*	Maximum	72	75	82	74	84	76	80	59	77	85	92	93	57	69	75	74	79	81	86	87	90	88	90	95	95	97	96	98	96	94	95	83.6
	Minimum	40	42	43	60	57	56	51	44	45	47	57	60	46	28	41	41	41	49	46	48	50	52	62	55	60	62	64	64	62	65	65	52.0
Edmonton	Maximum	66	72	82	75	78	73	70	63	72	80	88	83	73	68	72	73	80	75	79	84	86	85	85	90	91	92	92	94	95	92	91	80.5
	Minimum	40	40	56	46	43	57	50	45	48	45	68	67	48	45	38	40	65	47	45	46	49	55	47	51	59	63	60	60	59	60	60	51.7
Eubank *	Maximum	68	69	79	77	74	76	74	70	69	77	85	82	79	75	71	70	75	80	80	83	85	83	83	88	90	90	90	93	94	90	86	80.2
	Minimum	39	39	43	50	55	58	51	44	45	44	56	63	50	43	56	40	49	44	45	45	47	47	52	50	59	61	57	60	59	59	59	50.0
Frankfort	Maximum	72	72	85	84	81	70	81	78	79	81	89	92	82	73	77	78	79	85	88	89	90	86	89	41	95	97	96	99	99	95	89	85.2
	Minimum	40	42	44	61	62	61	50	45	45	47	48	60	50	40	40	42	44	43	47	50	51	52	54	52	60	63	65	64	63	65	60	51.9
Franklin	Maximum	65	68	78	73	74	70	75	60	72	79	88	80	62	66	71	72	75	79	78	82	85	86	85	90	91	93	91	92	95	89	89	79.1
	Minimum	42	46	43	61	60	57	55	46	52	60	64	61	49	43	45	47	50	51	56	53	56	61	64	59	65	67	68	70	67	69	69	56.6
Greensburg*	Maximum	66	71	82	72	77	85	78	68	74	80	88	83	57	68	73	75	77	82	82	86	87	88	86	92	93	94	95	95	97	94	93	81.9
	Minimum	32	39	44	52	59	58	50	45	47	44	58	63	50	41	38	40	42	41	46	46	47	49	54	50	58	62	61	63	60	61	61	50.4
Irvington	Maximum	64	66	79	77	78	72	75	55	70	80	86	81	57	65	77	71	75	79	80	83	85	83	82	90	92	92	93	94	92	94	89	79.2
	Minimum	40	41	46	62	60	58	51	45	45	56	66	55	45	58	40	45	50	45	49	52	50	53	55	57	63	65	70	65	62	68	60	53.5
Leitchfield	Maximum	67	69	79	74	78	70	75	58	72	79	88	75	60	65	72	73	76	80	82	84	84	84	84	89	91	91	90	92	92	90	90	79.1
	Minimum	40	43	46	61	59	58	53	45	46	47	59	60	46	40	40	45	47	46	49	49	50	52	57	55	61	62	66	64	63	64	62	52.7
Lexington	Maximum	60	62	77	69	74	69	71	51	67	75	85	80	57	62	67	66	71	76	77	82	83	79	78	86	90	90	90	92	92	87	85	75.8
	Minimum	37	40	48	60	60	55	51	44	47	50	62	57	47	42	49	46	46	50	57	62	64	60	58	60	67	68	68	68	72	70	62	55.7
Loretto	Maximum	65	68	77	77	76	76	75	72	72	77	86	83	72	67	72	73	78	81	82	84	85	83	83	88	90	90	91	93	93	90	90	80.3
	Minimum	39	38	40	60	59	59	48	44	46	48	62	66	47	39	37	45	43	39	45	46	47	50	54	49	60	63	66	62	63	60	58	51.0
Louisville	Maximum	65	67	78	73	78	71	75	53	72	80	88	77	55	64	70	71	74	79	81	83	83	80	81	88	91	92	91	93	92	88	90	78.2
	Minimum	42	45	52	63	62	60	51	46	49	54	67	50	47	44	45	51	49	53	54	56	58	64	60	61	70	72	73	71	70	72	64	57.3
Do. (Cherokee Park)	Maximum	67	69	80	74	78	73	77	56	74	83	88	81	65	67	69	74	75	81	83	85	84	78	82	91	91	92	90	93	90	89	88	79.6
	Minimum	40	41	45	61	62	60	52	46	48	49	64	65	48	39	40	45	44	46	55	51	52	54	57	53	64	65	69	64	64	67	60	53.9
St. John *	Maximum	64	66	70	70	78	72	75	67	72	78	77	78	58	66	72	71	74	79	82	85	88	86	83	89	91	92	93	95	95	98	92	79.1
	Minimum	40	40	40	50	51	58	51	43	44	48	54	64	47	38	38	45	48	43	49	47	48	50	54	53	57	61	64	60	60	62	59	50.5
Scott	Maximum	61	65	75	71	75	70	73	60	70	76	83	76	60	63	68	69	71	80	84	86	85	83	79	85	90	90	91	94	93	87	89	77.5
	Minimum	36	39	45	61	61	59	51	44	47	51	62	60	46	36	40	43	41	46	49	50	53	58	58	52	65	67	70	64	67	67	57	53.1
Shelby City	Maximum	66	70	82	76	75	70	77	68	72	82	88	83	71	67	73	73	74	83	81	86	86	84	85	94	94	95	94	98	97	91	87	81.4
	Minimum	37	40	44	61	59	60	52	45	46	47	61	65	49	43	59	43	42	44	49	50	50	53	58	52	62	65	65	65	62	63	62	52.7
Shelbyville *	Maximum	66	68	77	72	78	70	74	55	73	79	85	78	56	66	75	74	75	82	84	87	86	83	81	90	91	91	92	96	94	92	90	79.4
	Minimum	36	39	43	50	60	60	49	45	44	47	67	61	47	36	38	44	43	43	48	48	49	51	54	54	63	63	66	64	64	65	59	51.6
Taylorsville	Maximum	63	66	79	72	78	71	75	60	73	80	88	80	67	64	72	70	74	79	81	84	85	83	80	89	91	92	93	94	93	88	90	79.2
	Minimum	40	42	44	57	61	57	50	45	48	44	58	61	48	37	37	44	38	40	45	46	47	48	50	48	57	59	62	60	60	61	56	50.0
Williamstown *	Maximum	65	69	76	72	75	71	72	72	72	78	85	79	55	65	70	70	73	78	83	84	84	81	79	86	91	92	91	93	93	91	87	78.5
	Minimum	34	36	46	54	60	56	50	44	44	49	56	63	47	36	42	45	44	49	52	58	58	60	57	56	64	68	70	69	68	66	57	53.5
Eastern Section.																																	
Beattyville *	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Berea	Maximum	50	67	81	77	76	79	76	64	76	74	72	72	68	70	79	75	88	82	80	84	85	89	82	90	91	90	91	96	96	92	88	80.0
	Minimum	38	37	57	67	58	60	58	50	50	54	52	61	42	37	60	48	62	60	52	49	49	53	57	54	66	70	69	66	64	60	63	55.6
Farmers	Maximum	58	60	83	76	75	78	68	60	71	80	88	89	72	67	68	64	74	68	84	86	88	84	84	92	92	93	94	96	96	97	90	79.8
	Minimum	35	35	35	36	61	54	53	46	46	41	52	59	54	49	36	38	37	37	38	44	45	44	48	46	42	56	58	58	64	64	65	47.6
Maysville*	Maximum	67	71	83	74	77	77	77	52	73	81	88	86	56	68	74	73	77	84	85	88	90	84	82	92	97	96	96	99	†	92	91	81.6
	Minimum	35	36	37	47	61	57	48	45	44	45	55	67	51	43	38	40	37	39	41	46	46	49	53	46	56	61	62	71	61	61	53	49.4
Middlesboro..	Maximum	72	73	78	75	73	80	74	69	66	77	85	85	73	63	71	74	76	78	78	82	85	84	84	89	90	89	91	93	94	90	87	79.9
	Minimum	38	39	40	64	61	57	51	49	47	43	54	56	54	51	38	40	39	41	41	42	52	46	54	48	56	55	54	60	57	60	60	49.9
Mount Sterling*	Maximum	65	69	82	73	76	73	82	56	79	81	90	89	56	64	70	72	80	78	84	86	85	85	87	90	93	93	96	94	96	96	88	80.9
	Minimum	37	49	47	47	60	60	49	44	46	46	55	64	51	45	40	46	44	44	51	50	52	51	55	52	63	65	65	66	66	64	62	52.8
Richmond *	Maximum	65	70	80	69	74	75	74	54	71	78	86	85	55	67	72	73	76	81	83	85	86	84	83	90	94	94	94	96	96	89	88	79.3
	Minimum	38	40	48	60	60	60	52	45	46	51	64	64	51	45	43	45	44	47	55	54	56	58	59	57	70	68	69	67	68	67	64	55.6
Weeksbury	Maximum	67	69	82	79	74	79	74	69	64	79	88	88	75	59	69	74	76	79	79	83	84	85	84	91	94	94	92	94	95	91	86	80.5
	Minimum	45	38	41	64	57	55	51	49	44	42	57	59	54	49	38	38	42	43	46	46	47	51	59	52	62	59	59	62	62	62	61	51.4
Williamsburg *	Maximum	71	83	76	70	78	81	77	60	81	86	93	89	59	70	75	79	77	80	82	85	87	87	88	92	93	94	94	95	96	93	90	82.6
	Minimum	37	37	45	40	60	56	52	47	47	45	43	68	56	50	38	39	43	40	42	44	45	47	57	55	48	55	55	61	58	60	51	65.8

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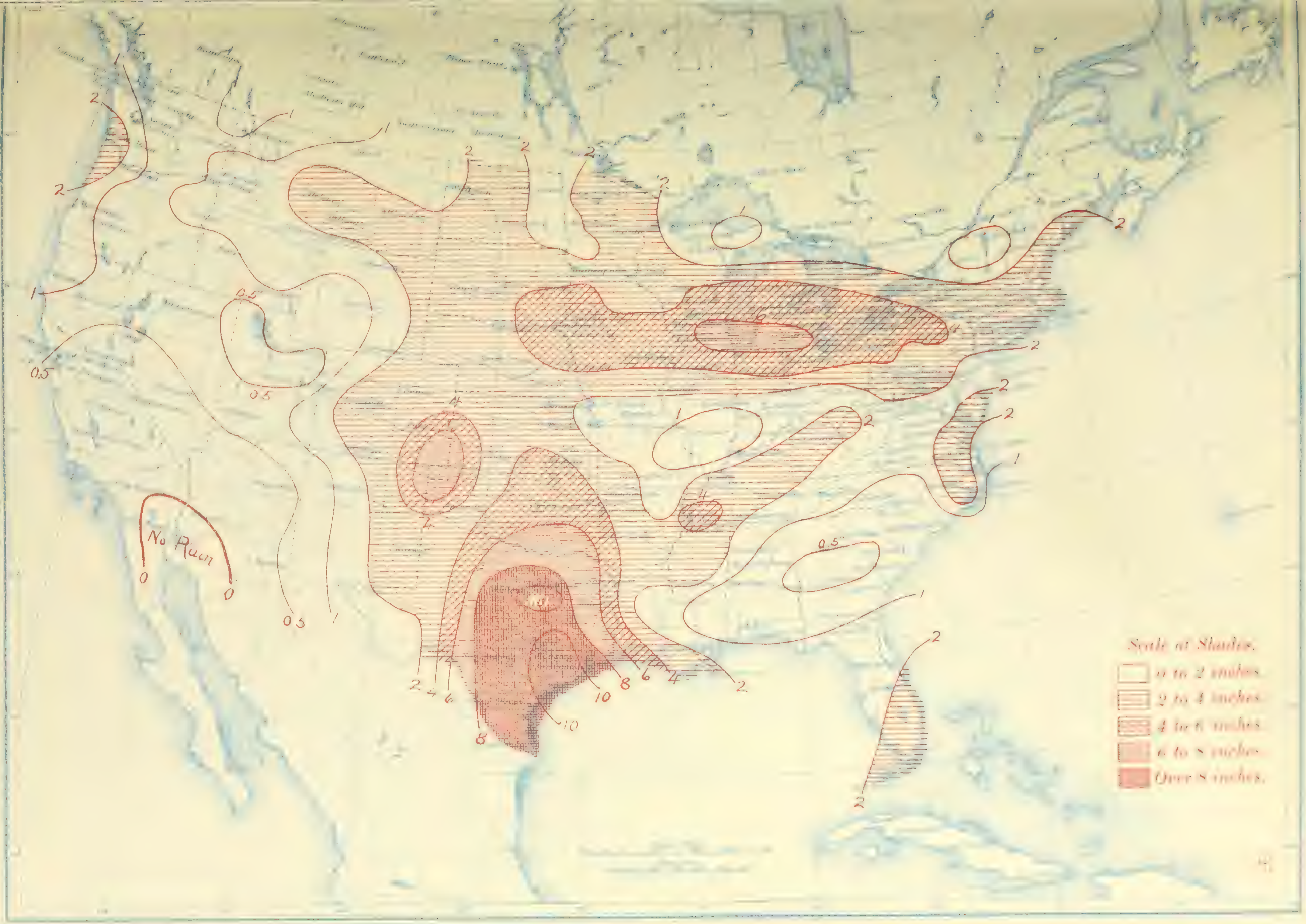
*Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. †100, ‡103.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
0
0.5
1
2
4
6
8
10

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

~~JULY,~~ 1914
JUNE 1914

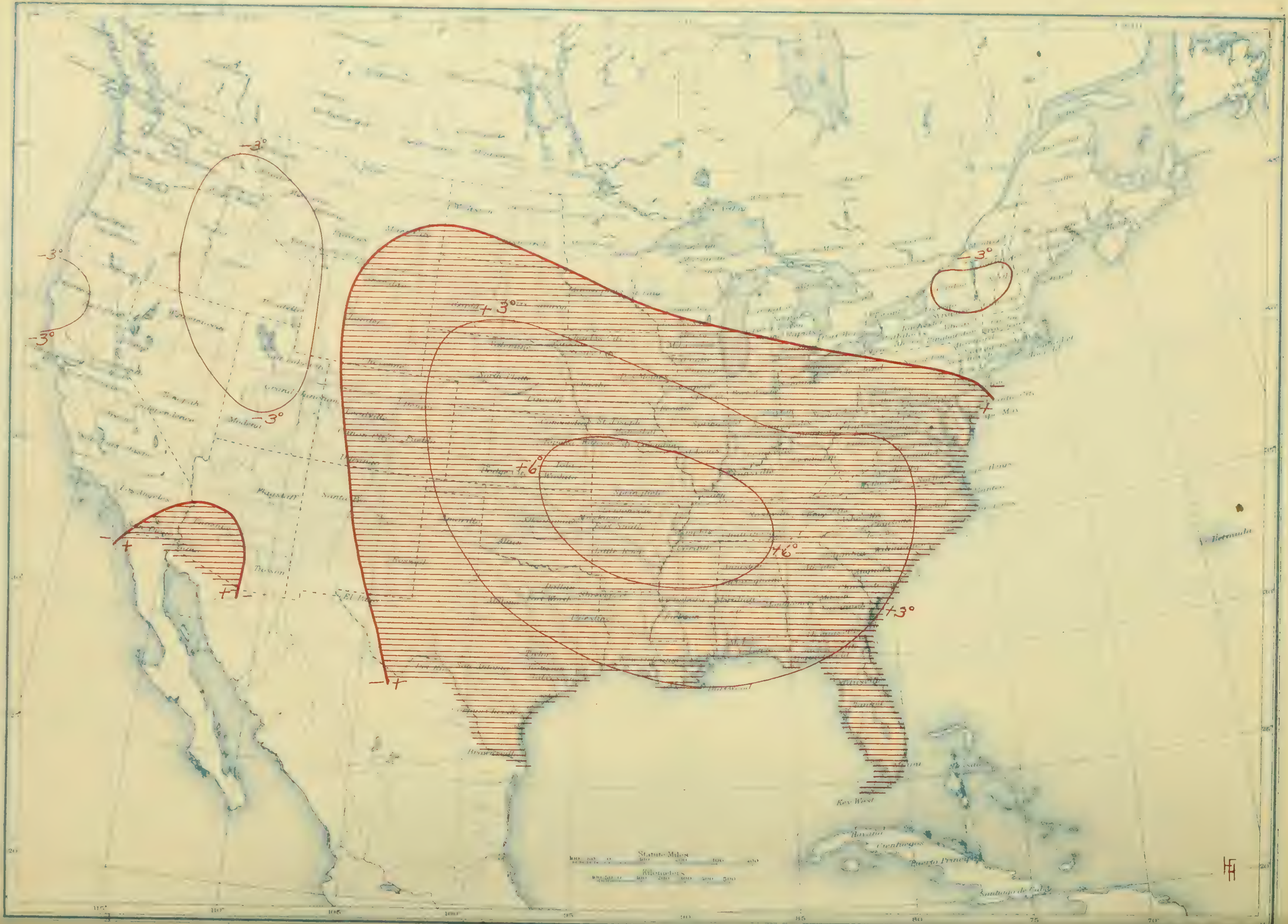
BY

FERDINAND J. WALZ

PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 27, 1914

Departure of the Mean Temperature from the Normal, June, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XIX. Louisville, Ky., June, 1914. No. 6

GENERAL SUMMARY.

Over the State as a whole, the weather for the month of June, 1914, was disastrous to farming and gardening interests. High temperatures, breaking all previous records for June, and the smallest average precipitation ever recorded for this month combined to produce conditions very unfavorable for the planting, cultivation and growth of the staple crops. The only sections that received the normal amount of rainfall were in the vicinity of Lexington, Richmond and Middlesboro. At several stations in the western section, only light scattered showers of little consequence had occured since the 6th of May. The drought that began in May was relieved in the north-central and eastern counties by the heavy rains of June 5th, but over the rest of the State the rainfall was comparatively light and scattered, affording, on account of the high temperatures and unusually dry atmosphere, only temporary relief to the localities visited. At the end of the month the accumulated deficiency in precipitation since January 1st at the various stations ranged between 7 and 12 inches, in many localities amounting to one-half the normal rainfall. Small streams were failing, springs and wells were drying up, and stock was suffering on account of shortage of water.

On account of the prolonged drought, much land could not be prepared and planted, especially in the case of tobacco. Except in the few localities in the north-central counties that were favored with good rains, the growing crops at the end of the month were in a precarious condition; and even in those places where good rains were received the effects of the rain was not what it would have been under ordinary conditions because of the excessive heat.

PRESSURE.

The low pressure areas affecting the weather conditions during the month were generally shallow and not well developed, except those of the 5th and 28th. Areas of high pressure, especially those overlying the southern and southeastern states, largely dominated.

The mean sea level pressure, computed from two stations, was 30.01 inches. The highest was 30.22 inches on the 2d and the lowest 29.76 inches on the 27th, both at Louisville.

TEMPERATURE.

Except in the periods 1st-3d, 16th-19th and 29th-30th, maximum temperatures of 90° or above were registered on nearly every day at all stations. Temperatures of 100° and over occured at most stations with unusual frequency, the number of days on which such temperatures were registered being much greater than in June, 1913, which had established a record for excessive heat. At most stations in the western part of the State there were from 4 to 11 days with temperatures of 100° or over. The periods of greatest heat were the 9th-11th and 22d-27th. The highest temperature, 108°, on the 24th at Beaver Dam, is the record maximum temperature for the State for June. The cool periods were brief and the minimum temperatures not unusually low, the lowest being 45° at Farmers on the 17th.

The mean for the State, determined from the records of 36 stations, was 78.3°, the average daily excess being 4.4°. With the exception of 1890, this is the highest average temperature for the State for June on record. The extreme heat was most pronounced in the western and central counties, where the average daily temperature departure at the various stations ranged from 6° to 9° above normal.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 70 per cent and at 7 p. m. 52 per cent.

PRECIPITATION.

Precipitation ranged between 2 and 4 inches over most of the east-central counties. Over the northeastern and western counties it was less than 2 inches, and over a large area, in the western, central and southern portions of the State it was less than 1 inch. From the reports of 48 stations, the average amount for the month was 2.30 inches, which is 1.92 inches less than the normal and the least average rainfall for June since State averages have been kept. The amounts at the various stations ranged between 0.26 inch at Blandville and 5.54 inches at Richmond. Heavy rains occured in some localities on the 1st and 2d, and also in the central and eastern counties on the 5th. Practically all the remainder of the precipitation consisted of light scattered showers that occured mostly in the period 12th-14th and on the 18th. During the last decade there was scarcely any rain.

WIND.

The total wind movement at Louisville was 7301 miles, and at Lexington 5982 miles, the average hourly velocity being 10.1 and 8.3 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 34 miles per hour from the north on the 1st, and at Lexington 40 miles per hour from the northwest on the 25th.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 80 and at Lexington 72.

Comparative data for June.

Year.	Temperature.				Precipitation.	
	Monthly average	Departure from 25 year normal	Highest.	Lowest.	Monthly average	Departure from 25 year normal
1889	70.6	−3.3	99	38	5.27	+1.05
1890	78.4	+4.5	101	51	4.96	+0.74
1891	77.1	+3.2	97	51	4.48	+0.26
1892	75.8	+1.9	101	48	4.23	+0.01
1893	73.3	−0.6	97	46	4.64	+0.42
1894	75.6	+1.7	102	35	2.69	−1.53
1895	75.9	+2.0	104	47	3.63	−0.59
1896	73.5	−0.4	98	46	4.64	+0.42
1897	73.4	−0.5	101	41	3.61	−0.61
1898	76.2	+2.3	101	45	3.90	−0.32
1899	76.1	+2.2	100	44	2.80	−1.42
1900	73.9	0.0	100	40	6.14	+1.92
1901	75.6	+1.7	104	42	3.97	−0.25
1902	73.4	−0.5	101	39	4.75	+0.53
1903	68.6	−5.3	96	37	3.61	−0.61
1904	73.2	−0.7	99	48	3.14	−1.08
1905	74.8	+0.9	106	45	4.49	+0.27
1906	73.9	0.0	99	12	4.53	+0.31
1907	70.2	−3.7	95	41	4.91	+0.69
1908	73.4	−0.5	102	43	4.36	+0.14
1909	74.5	+0.6	99	43	5.03	+0.81
1910	70.0	−3.9	99	36	5.20	+0.98
1911	75.2	+1.3	106	45	4.06	−0.16
1912	70.2	−3.7	95	38	3.48	−0.74
1913	75.0	+1.1	107	38	2.87	−1.35
1914	78.3	+4.4	108	45	2.30	−1.92

Climatological data for June, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	81.9	+ 8.9	108	24	58	3†	40	0.62	− 2.91	0.59	0	2	25	4	1	SW	W. T. Austin.
Blandville	Ballard	445	12	81.3	+ 6.4	102	25	61	17†	29	0.26	− 4.57	0.16	0	3	20	7	3	SW	E. W. Horr.
Calhoun	McLean	393	11	80.6	+ 5.5	103	27	56	29	38	1.91	− 1.61	1.04	0	4	6	23	1	SW	W. A. Taylor.
Earlington	Hopkins	370	24	82.1	+ 6.5	106	24	56	3	43	0.35	− 3.18	0.32	0	2	26	4	0	S	Brick Southworth.
Hopkinsville	Christian	524	18	80.8	+ 6.2	105	26	55	3	40	2.90	− 1.74	1.00	0	5	19	4	7	E	W. F. Randle.
Owensboro	Daviess	479	17	79.0	+ 4.7	102	27	57	20	33	2.33	− 1.19	0.85	0	5	19	4	7	SE	Henry S. Berry.
Paducah	McCracken	341	25								0.46	− 4.45	0.36	0	2	29	0	1		S. A. Fowler.
Central Section.																				
Alpha	Clinton		20	78.2	+ 5.1	98	25	51	3	31	1.75	3.29	0.70	0	3	25	1	4	S	W. W. Hicks.
Anchorage	Jefferson	700	13	77.4	+ 5.7	104	27	47	17	37	2.00	− 1.76	1.01	0	5	23	5	2	SW	C. E. Barret.
Bardstown	Nelson	637	17	80.2	+ 5.6	105	24†	55	3	35	3.20	− 1.15	1.80	0	6	22	7	1	S	Thos. S. Talbott.
Bowling Green	Warren	500	25	80.7	+ 4.8	105	26	55	3	40	1.33	− 2.38	0.65	0	5	18	10	2	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								1.94	− 2.44	0.85	0	6					K. W. Massey.
Cloverport	Breckenridge		0								1.48		0.59	0	6	25	4	1		W. A. Cockerill.
Edmonton	Metcalfe	600	23	78.6	+ 5.5	103	25	50	18	37	2.28	1.99	0.50	0	6	18	12	0	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	76.5	+ 5.4	99	25†	51	3	37	2.39	− 1.69	1.03	0	4	15	8	7	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	78.1	+ 4.8	104	27	52	3	33	3.43	− 0.69	1.29	0	7	16	10	4	S	Geo. L. Barnes
Franklin	Simpson	691	20	81.8	+ 6.9	103	26†	58	3	32	0.71	− 3.26	0.30	0	4	3	27	0	SW	J. E. Newman.
Greensburg	Green	581	22	79.3	+ 5.8	105	25†	53	3	40	2.66	− 1.87	0.91	0	6	13	4	13	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11								2.31	2.18	1.23	0	6					Miss Lulu Wood.
Irvington	Breckenridge		16	79.4	+ 5.8	102	26†	53	30	35	1.38	− 2.74	0.47	0	4	26	3	1	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	78.8	+ 6.2	103	27	56	3†	32	0.89	− 3.07	0.48	0	4	22	8	0	SW	John E. Stone.
Lexington	Fayette	989	26	75.8	+ 2.6	99	27	53	17	29	4.77	+ 0.78	2.97	0	8	14	13	3	SW	U. S. Weather Bureau.
Loretto ‡‡	Marion	681	16	77.9	+ 5.1	103	27	51	3	35	2.18	− 2.46	0.80	0	8	19	5	6		Loretto Academy.
LOUISVILLE	Jefferson	525	42	78.9	+ 2.9	101	25	55	17	28	2.20	− 2.03	1.38	0	5	9	17	4	SW	U. S. Weather Bureau.
Do. Cherokee Park	Do.		4	77.5		101	27	53	17†	33	2.30		1.43	0	5	9	19	2	SW	Wm. I. Hunt.
St. John	Hardin	777	18	78.0	+ 6.2	103	25	51	30	37	1.82	− 2.22	0.53	0	6	19	6	5		Sisters of Loretto.
Scott	Kenton		16	75.8	+ 4.1	100	25	50	30	34	3.48	− 0.22	2.15	0	6	15	12	3	S	E. B. Wilson.
Shelby City	Boyle	1087	20	78.2	+ 6.6	103	26	52	3†	37	2.29	− 1.53	0.97	0	4	18	10	2	SW	H. F. Ewing.
Shelbyville	Shelby	759	25	77.4	+ 3.5	105	27	50	17	41	1.22	− 3.48	0.74	0	6	21	5	4	S	C. R. Burnett.
Taylorsville	Spencer	489	12	76.9	+ 4.5	102	27	48	3	42	2.25	− 2.71	1.34	0	6	12	13	5	SW	E. D. Bourne.
Williamstown	Grant	943	11	75.0	+ 4.6	101	27	50	17	41	3.07	1.19	2.09	0	4	20	7	3		Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	77.8	+ 6.0	105	24	48	3†	47	2.66	2.22	1.56	0	7	11	8	11	W	G. W. Cann.
Berea	Madison	1070	13	78.3	+ 6.3	101	25	55	3†	35	3.91	− 1.35	1.50	0	6	21	7	2	NW	C. F. Rumold.
Catlettsburg	Boyd	534	25								1.60	− 3.08	0.52	0	9					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								1.70	− 2.52	1.24	0	5	17	10	3	S	J. V. Oldham.
Farmers	Rowan	668	8	75.0	+ 3.6	102	25	45	17	44	1.18	− 2.81	1.18	0	1	20	9	1		Lee Craycraft.
Hazard	Perry		0								2.73		0.90	0	10					Kelly E. Watts.
Jackson	Breathitt		4								1.20		0.80	0	2					H. R. Lafon.
London	Laurel		0								3.66		0.96	0	9					C. R. Lee.
Louisa	Lawrence		2								3.03		2.25	0	7					Lucien S. Johnson.
Manchester	Clay		3								3.01		1.85	0	4					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	76.2	+ 3.4	105	27	47	3†	45	1.73	− 3.05	1.22	0	5	17	11	2	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	75.8	+ 3.6	97	11	51	1	38	4.73	+ 0.19	1.50	0	10	19	11	0		B. H. Perkins.
Mount Sterling	Montgomery	930	24	78.0	+ 5.6	102	24	53	3	10	3.91	− 1.07	2.86	0	6	18	11	1	W	H. Clay McKee.
Pikeville	Pike		6								2.26		0.88	0	8					I. M. Williams.
Richmond	Madison	926	22	77.7	+ 4.4	101	25	53	17	32	5.54	+ 1.65	3.00	0	10	22	4	4	S	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	76.8		98	25†	50	17	37	2.80		1.10	0	5	26	0	4	E	O. A. Lund.
Williamsburg	Whitley	939	18	78.0	+ 4.7	104	24	51	19	40	2.47	− 2.20	0.53	0	9	20	2	8	E	N. C. Jones.
State averages and extremes				78.3		108	24	45	17	47	2.30		3.00		5	18	8	4	SW	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

MISCELLANEOUS.

There were many prostrations from heat, especially on the 9th, 11th, 24th and 27th.

The following are the most important items of damage caused by local thunderstorms:

June 1.—Barn burned by lightning and several head of stock killed at Polkville. Two horses killed by lightning at Hodgenville.

June 3.—Residence of Jack Brown, near Rockport, destroyed by wind, his 16-year old son killed and other members of the family injured.

June 5.—A garage burned by lightning at Louisville with a loss of about $5,000.

June 12.—A barn burned and horse killed by lightning at Matlock.

June 13.—Much damage done to buildings and timber by wind near Edmonton.

June 14.—Widespread damage by wind and ligntning in Christian County, at Greensburg, Owensboro, Bowling Green, Scottsville and Cloverport.

June 18.—Two cottages burned by lightning in vicinity of Louisville.

June 25.—Considerable damage caused by a hailstorm and windstorm at Lexington. Several buildings burned by lightning at Nicholasville and Georgetown.

June 26.—Buildings blown down and some sheep killed by lightning near Mt. Sterling.

The rivers of the State were at low stages throughout the month.

A brilliant meteor was observed by persons in various parts of the State at 3:09 a. m. of the 25th. It appeared in the northeast and moved toward a point nearly south leaving a trail of light that remained visible for about five minutes.

Daily Precipitation for June, 1914.

STATIONS		Day of month																															[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam	G		.03												.59																		[illegible]
Blandville	M	.02					.16							T		.08				T.													[illegible]
Calhoun	G		.32										.50		1.01						[illegible]					T							[illegible]
Earlington	G		.03					T		T			T					T									.32						[illegible]
Hopkinsville	C						1.00						.30	.55	.75	.25																	[illegible]
Owensboro	O		.85			T.	.63						.10	.09	.76				T.		T.						T.						[illegible]
Paducah	O						.36									.10																	[illegible]
Central Section.																																	
Alpha	C	.75												.60				.45															[illegible]
Anchorage	O	.39				1.01							.31		.25				.04							T							[illegible]
Bardstown	S		1.80			.72	.23							.12	.24				.09														[illegible]
Bowling Green	G		.65					.05						.20	.33				.10								T.						1.33
Burnside	C		.21			T	.15			.06				T.	.85				.62									.05					[illegible]
Cloverport‖	O.		T.			.15	.51						.03	.17	.59		T.				.03						T.						1.48
Edmonton	G.	.45	.48			.25							T.		.50				.35							[illegible]							[illegible]
Eubank	C		1.03				.13								1.02				.21														[illegible]
Frankfort	K		.70			1.29	T.	1.20					.15	.03	T.				.03		.03						T						[illegible]
Franklin	G	.21												T.	.30	.10		T.								T.							0.71
Greensburg	G ‡		.85			.10	.25							.30	.91				.25	T.													[illegible]
High Bridge	K		.52			1.05	.18							.08	.30				.18														2.31
Irvington	O	.18				.47							.45		.28																		1.38
Leitchfield	G	.48				.12							.05	.24																			[illegible]
Lexington ***	K	1.10			.63	2.34	.08						.06	T.		T.			.06	.09						.41							4.77
Loretto	S	.28	.54			.80	.02						.10	.01	.32				.11														2.18
Louisville***	O	.33				1.38							.30	.16				T.	.03							T.							2.20
Do (Cherokee Park)	O	.40				1.43	T.						.30		.16				.01														2.30
St. John	S		.05			.53	.52						T.	.25	.35				T.		T.						.12						1.82
Scott	L	.82			T.	2.15		.18			.11	.20				T.			T.	T.						T.	.02						3.48
Shelby City	K.	.35				.67	T.						T.		.30				.97														2.29
Shelbyville	S		.12			.74	T.	.05						.14	.10				.07														1.22
Taylorsville	S	.02				1.34	.50						.08	T.	.27				.04														2.25
Williamstown	L		.50			2.09		.40											T.	T.	.08						T.	T					3.07
Eastern Section.																																	
Beattyville‖	K.	.26				1.56	.06						.06	.18				.50									.04						2.66
Berea	K.	1.50	.02			.65							.04						1.10							.60							3.91
Catlettsburg‖	B.				.06	.52	T.		.38												.16				.10	.16	.10	.04	.08				1.60
Falmouth	L	.18	.22			1.24		.04											.02									T.					1.70
Farmers	L.					1.18																											1.18
Hazard‖	K.		.36			.90		.05	T.					.45	.10				.55	.11		.02		.02			.17						2.73
Jackson	K		.40																.80														1.20
London‖	C.		.86			.01	.04	.39	.19	.08					.96				.71								.42						3.66
Louisa	B.		.15			2.25			.37											.08						.08	.05		.05				3.03
Manchester‖	K.		1.85					.01												.80							.35						3.01
Maysville‖	O.		.20			1.22		.01											T.	.08							.22						1.73
Middlesboro	C.	.37	.15				.05	.18					1.50	.03	.22				.87	.91	.45												4.73
Mount Sterling	L.		.15			2.86		.25						.14					T.		.01						.50						3.91
Pikeville	B.		.16			.50		.88	T.						.06		.20		.36	T.	.06					.04							2.26
Richmond	K.		3.00		.01	1.30	.28							.10	.10				.10	.02	.03		T.				.60						5.54
Weeksbury	B.		.30			1.10		.20									.60								.60								2.80
Williamsburg‖	C.		.41			.04			.39					T.	.45				.53	.03	.38	.05					.19						3.47

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

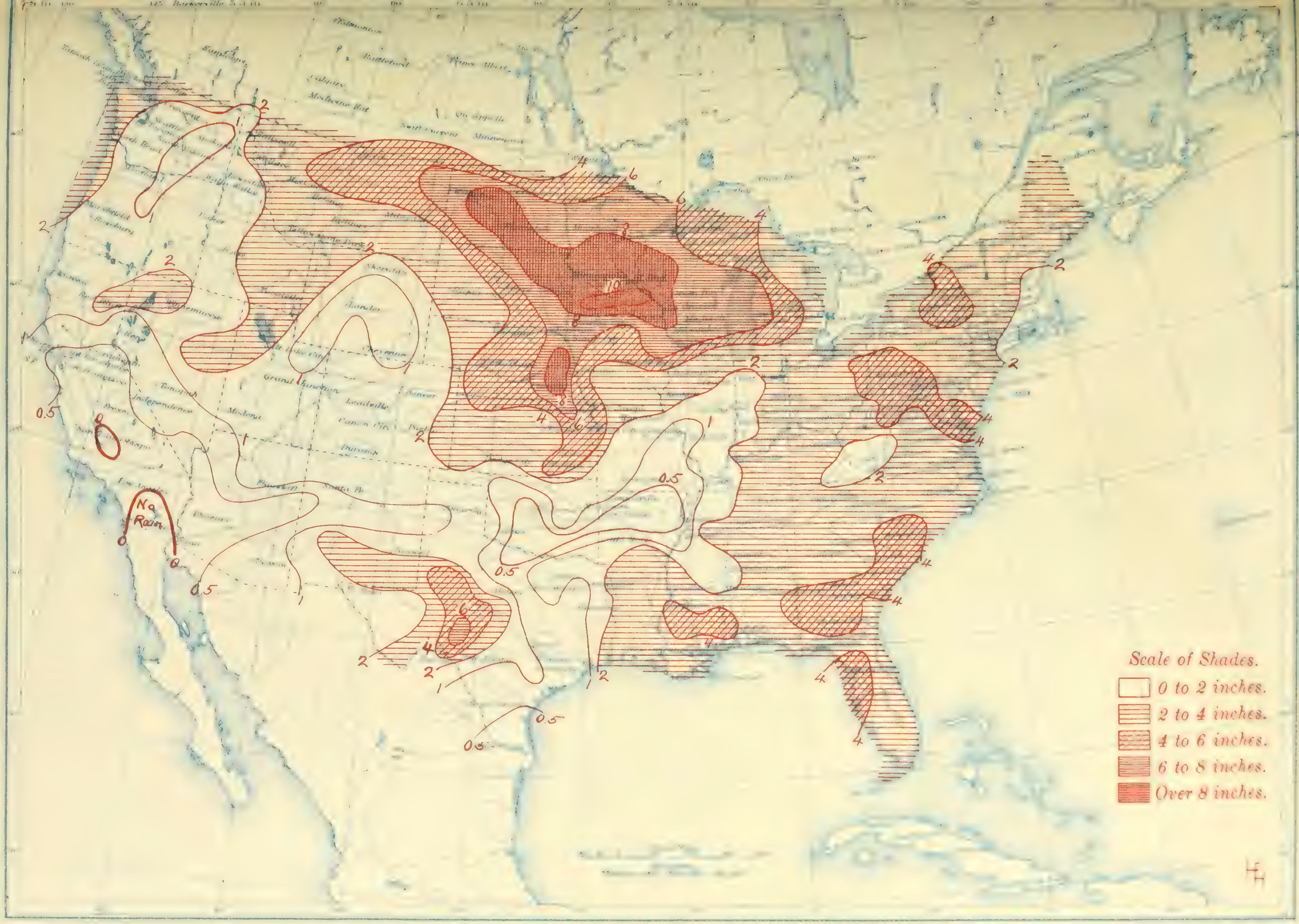
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for June, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	93	83	97	97	96	96	98	‡	1	5	1	93	96	89	90	78	90	95	‡	‡	99	99	6	8	3	7	6	96	89	91	..	96.7
	Minimum	62	63	58	71	72	69	69	69	67	65	69	74	65	66	71	61	61	65	66	67	63	77	75	69	71	68	74	69	59	58	..	67.1
Blandville	Maximum	89	85	92	89	92	88	93	94	96	98	98	94	96	97	91	75	80	89	96	94	97	96	97	99	2	1	‡	96	83	89	..	92.9
	Minimum	80	65	63	71	72	67	71	70	69	69	73	72	73	74	70	62	61	61	69	67	74	76	77	76	73	75	81	67	62	63	..	69.7
Calhoun	Maximum	92	82	91	92	90	92	96	97	98	2	2	95	93	89	91	77	83	88	95	90	99	99	99	2	1	2	3	99	85	87	..	93.7
	Minimum	65	63	60	73	74	70	70	70	68	64	71	70	68	66	71	59	59	64	66	66	65	75	74	71	73	69	76	73	56	58	..	67.6
Earlington *	Maximum	93	88	96	95	92	95	99	1	2	5	8	95	98	94	93	80	87	93	98	93	3	2	8	6	5	4	5	95	85	92	..	96.7
	Minimum	65	65	56	65	75	70	72	72	65	62	70	75	67	70	72	62	60	62	66	67	64	80	74	73	70	67	72	69	60	59	..	67.5
Hopkinsville	Maximum	91	89	95	95	90	95	99	‡	‡	4	3	96	97	97	88	79	84	90	96	96	‡	98	‡	8	4	5	4	96	86	82	..	95.4
	Minimum	62	65	55	58	69	67	69	68	66	68	68	73	68	67	68	63	61	62	62	68	67	72	70	69	70	70	73	65	61	60	..	66.1
Owensboro *	Maximum	88	80	83	91	89	84	93	93	95	98	99	85	89	90	85	74	81	85	92	87	98	97	97	‡	99	1	2	96	81	86	..	90.8
	Minimum	61	62	62	66	72	69	70	70	69	65	72	72	69	67	69	59	58	63	66	57	66	71	74	72	73	68	77	73	67	59	..	67.3
Central Section																																	
Alpha	Maximum	80	76	83	86	81	80	87	87	92	94	96	93	88	87	88	78	73	67	84	90	92	90	94	97	98	97	97	94	87	90	..	87.5
	Minimum	55	66	54	74	73	67	72	68	69	70	66	71	66	57	68	64	60	60	64	76	79	81	79	81	72	70	77	79	61	59	..	68.9
Anchorage	Maximum	87	89	89	92	80	89	93	94	95	98	97	84	85	86	87	82	84	87	90	88	98	99	‡	‡	1	2	4	90	83	86	..	91.3
	Minimum	58	60	56	64	66	65	67	68	67	65	67	67	64	64	63	56	47	64	62	60	68	71	69	70	69	67	73	60	52	53	..	63.4
Bardstown *	Maximum	89	84	90	92	83	89	94	97	99	‡	2	92	92	89	91	80	87	83	94	93	99	99	4	5	5	5	5	94	86	91	..	93.8
	Minimum	62	58	55	66	67	67	69	70	72	69	72	75	66	67	65	59	56	62	63	63	65	77	72	73	74	70	76	70	60	59	..	66.6
Bowling Green*	Maximum	94	84	95	94	93	93	96	97	1	3	2	96	95	97	96	81	87	87	96	98	‡	‡	99	3	4	5	4	97	87	91	..	95.8
	Minimum	62	64	55	66	69	65	65	66	67	69	69	69	65	64	70	61	60	59	60	60	65	74	71	72	72	70	70	70	62	58	..	65.6
Edmonton	Maximum	91	80	88	91	85	87	92	95	97	98	‡	90	92	92	93	83	80	80	90	94	97	97	99	1	3	0	2	96	87	87	..	92.2
	Minimum	65	63	52	65	65	65	66	66	67	65	63	70	65	65	67	65	60	50	68	67	67	75	67	69	70	69	73	70	58	57	..	65.1
Eubank*	Maximum	88	82	85	88	86	84	90	91	95	96	97	90	90	85	88	83	79	73	86	91	94	94	97	98	99	99	98	93	88	88	..	89.6
	Minimum	51	63	51	57	69	63	65	66	66	66	65	71	66	66	63	60	58	59	52	60	66	74	67	73	68	65	70	73	52	56	..	63.4
Frankfort	Maximum	80	77	83	90	85	87	87	92	92	95	95	94	88	93	92	82	86	84	86	89	99	1	1	2	1	2	4	1	89	89	..	91.5
	Minimum	58	57	52	67	57	67	57	68	70	68	72	70	65	66	65	59	54	62	64	60	69	73	70	73	71	69	72	70	60	56	..	64.7
Franklin	Maximum	90	80	90	92	86	91	91	95	97	99	99	95	90	93	91	79	84	82	91	95	99	97	99	1	2	3	3	97	91	90	..	93.2
	Minimum	69	67	58	74	71	68	72	73	72	74	71	72	69	67	73	65	61	62	65	76	73	78	75	75	77	74	78	73	65	62	..	70.4
Greensburg*	Maximum	95	80	89	93	82	88	94	96	‡	1	2	93	93	91	92	79	81	79	93	98	99	‡	3	4	5	5	4	99	88	92	..	94.0
	Minimum	55	63	53	63	68	65	66	66	65	68	67	72	67	65	66	61	56	60	59	65	65	75	68	69	70	67	71	69	57	55	..	64.6
Irvington	Maximum	90	88	88	93	85	88	92	94	95	98	98	90	87	85	85	84	82	85	92	87	97	98	99	‡	1	2	2	97	87	85	..	91.8
	Minimum	62	60	58	71	66	67	80	70	71	67	72	72	67	67	67	65	55	62	65	62	62	78	76	77	73	70	78	72	57	53	..	67.1
Leitchfield	Maximum	90	80	88	91	85	88	93	93	97	99	99	88	91	87	75	81	83	85	93	91	98	98	‡	1	1	2	3	93	83	88	..	91.5
	Minimum	61	61	56	71	68	67	68	70	70	67	69	71	67	66	60	59	58	63	64	65	63	73	69	71	71	70	75	68	59	56	..	66.0
Lexington	Maximum	81	76	84	88	76	85	88	90	92	94	93	85	81	84	84	71	79	73	85	85	93	94	94	97	97	96	99	88	77	82	..	86.4
	Minimum	61	57	56	66	64	63	66	71	74	74	75	•69	64	64	66	57	53	60	60	58	69	76	73	77	68	69	74	65	57	53	..	65.3
Loretto	Maximum	89	80	86	90	84	86	91	93	96	98	97	93	89	86	88	80	81	78	91	90	96	97	99	1	1	1	3	‡	87	87	..	91.3
	Minimum	56	56	51	71	66	64	68	67	69	66	69	71	65	66	64	58	56	61	62	63	64	76	67	70	70	66	73	70	56	54	..	64.5
Louisville	Maximum	85	80	87	90	81	86	92	94	95	98	97	84	87	80	85	74	82	83	87	86	97	97	98	‡	‡	99	1	87	79	84	..	89.3
	Minimum	65	59	61	75	66	68	72	74	76	74	73	70	67	67	68	56	55	64	66	60	69	80	77	80	79	74	76	67	58	58	..	68.5
Do (Cherokee Park)	Maximum	86	80	87	90	85	85	93	92	94	94	95	89	87	86	83	75	82	83	86	87	95	97	93	98	99	97	1	93	82	84	..	89.3
	Minimum	63	56	54	71	67	66	69	70	71	68	70	71	64	66	66	55	53	65	63	59	63	78	75	74	72	69	71	70	58	53	..	65.7
St. John *	Maximum	93	79	89	95	79	85	93	95	98	99	1	89	88	86	88	74	84	85	93	90	99	99	‡	2	3	‡	2	93	81	..	..	91.6
	Minimum	58	58	56	64	65	66	68	67	69	65	70	71	65	65	60	58	58	60	63	63	62	73	70	71	69	68	71	65	58	54	..	64.3
Scott	Maximum	79	78	84	91	93	87	88	94	93	95	96	82	84	82	80	74	80	76	81	85	94	95	98	99	‡	98	99	92	74	81	..	87.7
	Minimum	65	52	52	72	64	65	67	70	71	70	68	71	61	63	60	53	53	63	62	51	62	76	72	73	73	67	70	68	55	50	..	63.8
Shelby City	Maximum	89	79	89	90	82	82	90	95	97	2	99	90	88	87	89	77	83	79	89	90	95	96	‡	2	1	3	‡	95	84	88	..	91.0
	Minimum	57	58	52	68	66	64	67	68	68	67	70	70	68	66	65	58	52	59	61	63	68	76	71	75	73	67	73	76	59	54	..	65.3
Shelbyville *	Maximum	87	80	90	94	80	88	94	94	96	99	99	89	86	87	88	74	80	83	85	89	99	‡	3	3	3	99	5	92	83	86	..	91.2
	Minimum	59	54	54	59	64	64	67	69	69	67	70	70	62	64	69	57	50	57	60	55	58	68	70	73	72	67	70	77	57	52	..	63.5
Taylorsville	Maximum	87	79	90	94	81	86	93	94	95	97	97	85	85	86	85	75	82	81	87	87	97	98	99	1	‡	99	2	94	81	83	..	90.1
	Minimum	55	54	48	68	67	67	66	67	69	65	70	70	64	66	64	59	52	64	62	61	61	72	67	70	69	66	71	66	58	53	..	63.7
Williamstown *	Maximum	74	78	86	91	75	85	88	92	93	94	94	84	82	84	85	75	80	75	84	83	96	95	95	98	99	98	1	89	80	80	..	87.2
	Minimum	62	53	54	56	64	60	61	71	72	72	70	69	61	62	63	53	50	54	61	53	55	74	74	75	75	69	70	68	53	51	..	62.8
Eastern Section.																																	
Beattyville *	Maximum	86	88	95	99	88	88	97	1	2	1	99	92	94	92	92	80	86	70	92	94	98	98	1	5	‡	4	3	98	86	91	..	94.0
	Minimum	52	56	48	60	66	63	64	65	65	69	66	70	66	64	64	56	48	59	54	61	62	68	65	69	67	65	68	69	55	50	..	61.7
Berea	Maximum	87	78	88	96	83	84	91	94	95	97	99	89	89	86	86	76	80	74	87	88	96	97	99	‡	1	98	97	99	88	88	..	90.1
	Minimum	57	61	55	70	63	64	69	67	67	67	84	72	74	62	60	59	58	60	62	63	69	78	74	75	66	65	75	78	55	67	..	66.5
Farmers	Maximum	79	84	90	94	85	89	82	96	96	98	98	90	84	88	85	78	83	78	87	85	95	98	98	1	2	99	‡	94	86	86	..	90.2
	Minimum	49	49	46	57	66	67	64	66	65	65	66	66	62	60	58	48	45	57	52	58	60	70	65	67	67	64	70	68	46	52	..	59.8
Maysville*	Maximum	80	81	92	95	75	91	93	96	97	‡	99	88	88	90	89	78	85	72	89	87	99	‡	2	1	4	1	5	94	79	85	..	91.2
	Minimum	54	49	47	56	66	57	64	67	67	64	68	69	59	65	69	55	47	55	57	56	57	75	68	69	70	67	67	68	56	47	..	61.2
Middlesboro	Maximum	89	81	89	85	81	78	87	92	94	95	97	94	87	88	82	82	76	69	79	87	92	91	92	93	94	95	94	94	89	88	..	87.9
	Minimum	51	61	54	65	64	66	61	67	66	67	64	66	65	67	64	64	67	57	56	64	66	69	66	66	66	66	66	71	57	57	..	63.6
Mount Sterling*	Maximum	84	87	91	96	80	93	92	98	96	99	96	88	88	90	90	77	84	73	86	90	98	98	97	2	96	95	‡	94	86	83	..	90.9
	Minimum	60	57	53	63	67	64	66	70	71	70	72	72	65	64	63	62	55	59	60	58	58	76	73	73	74	68	73	74	59	54	..	65.1
Richmond *	Maximum	88	81	87	90	81	85	90	92	95	97	97	87	82	86	87	76	82	71	85	88	95	94	98	‡	1	98	98	92	81	86	..	89.0
	Minimum	63	57	55	68	65	65	68	70	72	72	74	74	67	67	67	59	53	60	61	61	65	76	73	76	76	69	71	74	60	54	..	66.4
Weeksbury	Maximum	89	79	89	92	85	83	87	90	95	95	97	95	85	86	88	77	81	74	86	94	94	95	96	94	98	97	98	96	89	88	..	89.7
	Minimum	56	59	52	66	65	65	63	64	66	68	65	69	65	66	63	57	50	57	55	61	65	71	68	77	84	67	67	74	59	53	..	64.0
Williamsburg *	Maximum	90	83	92	92	86	92	86	96	‡	1	1	97	92	97	90	81	80	73	82	95	97	98	98	4	98	98	1	93	90	92	..	92.8
	Minimum	53	61	52	67	66	65	62	60	65	67	68	67	66	66	67	66	57	60	51	61	64	69	66	68	68	66	68	68	56	56	..	63.2

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. ‡100.

1 101, 2 102, 3 103, etc.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain.
0.5
1
2
4
6
8
10

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CLIMATOLOGICAL DATA

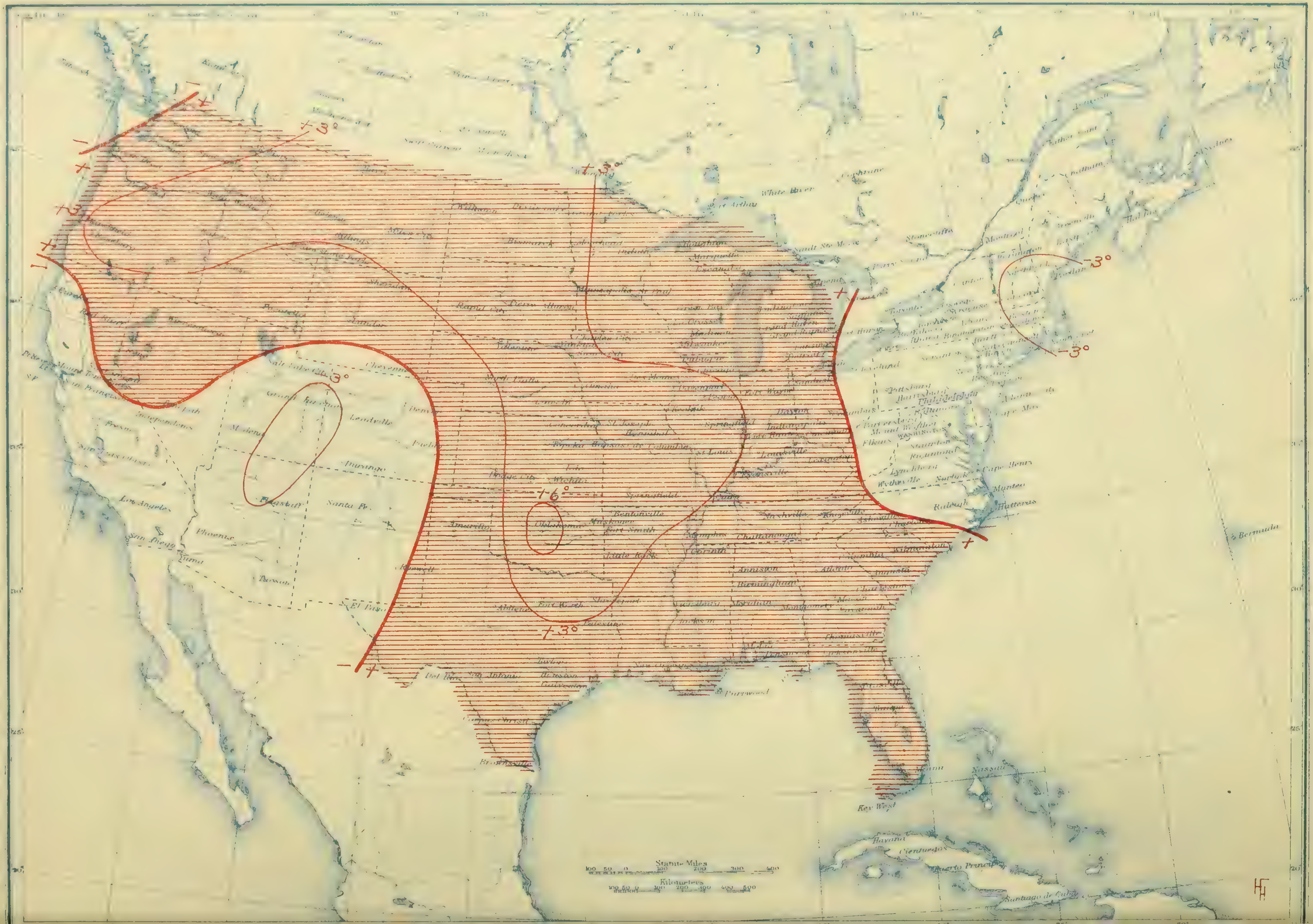
KENTUCKY SECTION

JULY, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 20, 1914

Departure of the Mean Temperature from the Normal, July, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XIX. LOUISVILLE, KY., JULY, 1914. No. 7

GENERAL SUMMARY.

Drought conditions that prevailed during June continued through July in most localities, being most severe in the western counties. A few counties in the upper basins of the Kentucky and Cumberland rivers and on the northeast border received about the normal July rainfall, but westward from these sections the total monthly amount decreased gradually until in the extreme western counties only a few light showers occurred. There were heavy local rains in the central and eastern counties during the period 14th-17th, but these rains occurred generally in brief downpours and where the drought was severe they failed to moisten the soil to any considerable depth, hence in many localities where a monthly amount of 3 inches or more was received, the crops were but little benefitted. These rains were preceded and followed by protracted periods of excessive heat that greatly injured all crops. In the western part of the State stock water had become very scarce by the end of the month, and the shortage in feed for stock had become so pronounced that farmers were selling their animals at a sacrifice rather than attempt to keep them over winter.

PRESSURE.

Southern and southeastern areas of high pressure generally controlled the weather situation during the month. The only disturbances of importance whose influence extended into this section were those of the 13th-14th and 16th-17th.

The mean sea level pressure, computed from two stations, was 30.00 inches. The highest was 30.23 inches on the 23d at Lexington and the lowest 29.73 on the 13th at Louisville.

TEMPERATURE.

The mean for the State, determined from the records of 35 stations, was 78.8°, the average daily excess being 2°. This average was exceeded in 1901 and 1913 with mean temperatures of 81.7° and 79.9°, respectively, and was equaled in 1893. However, there were about as many days with 90° and over or 100° and over as occurred in July, 1913. At several stations in the central and western sections there were from 4 to 14 days with maximum temperatures of 100° and over. The highest temperature was 109° at Greensburg on the 12th, which equals the record of 1913 and has been exceeded only once, namely, 112° in 1901. The cool nights of the first decade and during the periods 18th-20th and 29th-31st were a noteworthy feature. The minimum temperature, 43°, at Williamstown on the 30th, equals the record for the State for July.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 66 per cent and at 7 p. m. 44 per cent.

PRECIPITATION.

Over most of the eastern counties and the Cumberland River basin the total amount for the month ranged generally between 4 and 6 inches. Over most of the central counties amounts ranged between 1.5 and 4 inches, while the western portion of the State received less than 1 inch. The amounts at the various stations ranged between a trace at Paducah and 7.90 inches at Berea. At the latter station 3.30 inches occurred in 1 hour on the 14th. There was only one period, the 14th-17th, when precipitation was generous and fairly well distributed over the State, but even these rains did not extend over the western and many of the central counties. Light scattered showers occurred in the periods 1st-2d, 9th-11th and 25th-29th, and a few good rains in some of the eastern counties on the 26th. From the reports of 47 stations, the average amount for the month was 3.20 inches, which is 1.15 inches below normal.

WIND.

The total wind movement at Louisville was 6674 miles and at Lexington 5797 miles, the average hourly velocity being 9.0 and 7.8 miles respectively. The maximum velocity for 5 minutes at Louisville at the rate of 52 miles per hour from the southeast on the 10th, and at Lexington 34 miles per hour from the northwest on the 26th.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 78 and at Lexington 66.

ERRATA.

ERRATA: May, 1914—Jackson, rainfall on the 8th should be .40, on the 9th .30, and on the 13th trace. June, 1914—Edmonton, minimum temperature on the 18th should be 60 and lowest for the month should be 52 on the 3d; Richmond, temperature departure should be +4.3; Williamsburg, precipitation departure should be −2.08.

Comparative data for July.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	75.1	−1.7	98	50	5.62	+1.27
1890	73.0	−3.8	101	44	2.66	−1.69
1891	74.0	−2.8	91	47	4.08	−0.27
1892	76.5	−0.3	100	48	3.30	−1.05
1893	78.8	+2.0	101	50	3.48	−0.87
1894	76.2	−0.6	105	43	2.03	−2.32
1895	75.2	−1.6	99	49	5.75	+1.40
1896	77.4	+0.6	103	47	7.44	+3.09
1897	77.8	+1.0	107	50	4.79	+0.44
1898	77.8	+1.0	102	48	4.71	+0.36
1899	77.3	+0.5	100	47	3.78	−0.57
1900	77.9	+1.1	101	50	4.91	+0.56
1901	81.7	+4.9	112	48	1.72	−2.63
1902	78.1	+1.3	107	48	1.91	−2.44
1903	77.5	+0.7	104	49	3.53	−0.82
1904	75.2	−1.6	99	46	3.40	−0.95
1905	75.9	−0.9	102	52	5.93	+1.58
1906	75.2	−1.6	100	51	6.02	+1.67
1907	78.1	+1.3	102	40	4.71	+0.36
1908	76.9	+0.1	100	50	3.94	−0.41
1909	74.8	−2.0	99	48	6.01	+1.66
1910	76.2	−0.6	96	51	8.63	+4.28
1911	75.8	−1.0	105	42	2.28	−2.07
1912	76.8	0.0	100	53	5.50	+1.15
1913	79.9	+3.1	109	48	2.54	−1.81
1914	78.8	+2.0	109	43	3.20	−1.15

Climatological data for July, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	79.8	+ 2.6	103	12	55	3†	40	0.88	− 4.17	0.30	0	4	19	7	5	NE	W. T. Austin.
Blandville	Ballard	445	32	83.3	+ 5.4	101	12†	61	19	32	0.14	− 3.75	0.07	0	3	17	8	6	NE	E. W. Horr.
Calhoun	McLean	393	11	82.2	+ 5.2	106	12	56	20	40	0.68	− 4.74	0.31	0	4	7	23	1	N	W. A. Taylor.
Earlington	Hopkins	370	24	81.8	+ 3.9	107	12	52	20	47	1.44	− 2.86	0.77	0	4	24	4	3	S	Brick Southworth.
Hopkinsville	Christian	524	18	81.2	+ 2.7	106	12	56	20	41	2.45	− 1.86	1.40	0	4	18	2	11	E	W. F. Randle.
Owensboro	Daviess	479	17	80.4	+ 2.6	103	12	60	3†	33	1.73	− 2.40	1.35	0	2	17	7	7	S	Henry S. Berry.
Paducah	McCracken	341	25								T.	− 3.94	T.	0	0					S. A. Fowler.
Central Section.																				
Alpha	Clinton		20	77.0	+ 0.8	97	13	55	10†	38	4.76	− 0.94	1.90	0	8	18	8	5	W	W. W. Hicks.
Anchorage	Jefferson	700	13	78.8	+ 2.7	105	12	51	31	39	2.92	− 1.88	1.03	0	7	21	8	2	E	C. E. Barret.
Bardstown	Nelson	637	17	81.4	+ 3.2	107	12	55	31	45	1.41	− 3.58	0.47	0	5	21	4	6	S	Thos. S. Talbott.
Bowling Green	Warren	500	25	80.0	+ 1.0	104	12	55	30	39	3.32	− 1.02	1.00	0	6	18	10	3	W	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								5.48	+ 0.55	1.70	0	7					K. W. Massey.
Cloverport	Breckenridge		0								0.85		0.39	0	4					W. A. Cockerill.
Edmonton	Metcalfe	600	23																	Miss Lee Ray.
Eubank	Pulaski	1177	20	75.9	+ 1.2	101	12	48	31	42	5.11	+ 0.48	1.75	0	9	15	5	11	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	80.0	+ 3.6	103	12	53	31	37	1.29	− 2.68	0.61	0	5	18	9	4	N	Geo. L. Barnes
Franklin	Simpson	691	20	80.6	+ 3.1	101	11†	59	30	38	2.64	− 1.47	0.97	0	8	3	28	0	S	J. E. Newman.
Greensburg	Green	581	22	79.6	+ 3.2	109	12	51	31	45	3.82	− 0.87	1.53	0	8	9	6	16	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11								2.54	− 1.90	0.65	0	8					Miss Lulu Wood.
Irvington	Breckenridge		16	80.2	+ 3.1	105	12	57	19†	34	3.26	− 0.17	1.35	0	5	23	5	3	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	79.4	+ 3.0	102	12	56	31	38	2.57	− 1.95	1.32	0	8	20	10	1	SW	John E. Stone.
Lexington	Fayette	989	26	77.6	+ 1.0	100	12	57	19	29	2.63	− 1.81	1.23	0	8	14	10	7	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	78.1	+ 1.9	104	12	51	31	43	3.58	− 0.58	1.54	0	11	16	8	7		Loretto Academy.
LOUISVILLE	Jefferson	525	42	80.4	+ 1.8	102	12	58	19	32	2.59	− 1.15	1.32	5	7	16	9	6	N	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.		4	79.1		100	9†	55	31	33	2.33		0.99	0	5	16	12	3	SW	Wm. I. Hunt.
St. John	Hardin	777	18	79.0	+ 3.7	105	12	56	19†	39	2.67	− 0.96	1.95	0	9	15	6	10		Sisters of Loretto.
Scott	Kenton		16	77.6	+ 0.9	104	12	53	31	35	2.24	− 1.37	0.66	0	9	14	16	1	N	E. B. Wilson.
Shelby City	Boyle	1087	20	79.2	+ 4.2	104	12	46	31	44	3.03	− 1.20	1.00	0	9	18	10	3	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	79.3	+ 2.2	106	12	54	31	40	1.52	− 2.68	0.67	0	5	20	6	5	W	C. R. Burnett.
Taylorsville	Spencer	489	12	77.6	+ 1.8	104	12	52	31	39	3.02	− 1.82	0.91	0	8	18	7	6	NE	E. D. Bourne.
Williamstown	Grant	943	11	76.5	+ 1.4	104	12	43	30	41	3.28	− 1.16	1.43	0	4	14	13	4		Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	77.2	+ 1.7	107	12	46	31	48	4.70	− 0.70	1.60	0	9	12	5	14	SW	G. W. Cann.
Berea	Madison	1070	13	77.8	+ 1.6	103	12	49	31	44	7.90	+ 3.35	3.90	0	6	19	5	7	SW	C. F. Rumold.
Catlettsburg	Boyd	534	25								4.32	+ 0.22	1.60	0	6					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								2.47	− 1.44	0.80	0	6	18	10	3	W	J. V. Oldham.
Farmers	Rowan	668	8	75.5		104	12	46	30†	47	2.18		1.18	0	3	25	4	2		Lee Craycraft.
Hazard	Perry		0								5.68		1.55	0	8					Kelly E. Watts.
Jackson	Breathitt		4								4.20		1.30	0	5					H. R. Lafon.
London	Laurel		0								4.79		1.60	0	8					C. R. Lee.
Louisa	Lawrence		2								3.66		1.12	0	7					Lucien S. Johnson.
Manchester	Clay		3								3.83		0.97	0	7					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	77.6	+ 0.6	104	13	51	30†	44	4.02	− 0.49	1.43	0	9	16	12	3	S	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	74.1	− 0.4	98	12	52	6†	38	5.75	+ 0.25	2.20	0	9	14	15	2		B. H. Perkins.
Mount Sterling	Montgomery	930	24	78.0	+ 2.4	104	12	53	31	39	5.51	+ 0.50	2.68	0	6	14	11	6	W	H. Clay McKee.
Pikeville	Pike		6								3.88		1.00	0	8					I. M. Williams.
Richmond	Madison	926	22	79.0	+ 2.1	104	12	56	30†	35	4.62	+ 0.75	1.73	0	8	17	5	9	S	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	0	76.0		101	12	48	31	37	4.00		1.00	0	7					O. A. Lund.
Williamsburg	Whitley	939	18	76.8	0.0	101	12†	49	31	46	4.55	− 1.32	1.24	0	9	21	0	10	E	N. C. Jones.
State averages and extremes				78.8		109	12	43	30	48	3.20		3.90	0	6	17	9	5	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

MISCELLANEOUS.

There was much suffering from the excessive heat on the 12th in all parts of the State, two deaths and several prostrations occurring in Louisville.

The following are the most important items of damage caused by local thunderstorms, which were frequent and unusually severe during the month:

June 1.—A man was killed by lightning near Frazier.

June 9.—Considerable damage to crops was caused by hail in southern Jefferson county. A cold storage plant and other buildings in Louisville were burned by lightning with a loss of about $35,000.

June 10.—At Louisville a man and horse were killed and 6 persons shocked by lightning; also a boy was killed by lightning near Lagrange. Barns were burned by lightning in the vicinity of Marion and Bowling Green.

June 13.—A barn was burned and 2 horses killed by lightning near Elizabethtown.

June 14.—A barn was burned near Bowling Green and a residence at Livingston by lightning.

June 15.—A schoolhouse at Goff and a barn near Franklin were destroyed by lightning.

June 16.—Two men were killed by lightning, one at Louisville and the other at Hopkinsville. Lightning also destroyed a barn near Cynthiana and killed two head of stock near Fairview. A severe windstorm at Henderson caused the death of 2 persons, injured several others and caused damage estimated at $300,000. A barometer at Henderson showed an increase in pressure of about .15 inch during this storm, which indicates that it was of the usual squall type.

June 26.—A residence and barn were destroyed by lightning near Carlisle with a loss of $4,000. Much damage was done to telephone and lighting systems near Danville by wind.

June 27.—A barn was destroyed by lightning near Falmouth.

Forest and grass fires, due to the drought, did considerable damage in Edmonson county on the 8th.

Very low stages prevailed in the streams of the State during the month.

Daily Precipitation for July, 1914.

Stations.		Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam	G		T.									.25			.28			.30	.05														0.88
Blandville	M	T.			T.												.05	T.										.07				.02	0.14
Calhoun	G	T.	.07						T.	T.	T.				.15		.15	.31				T.					T.						0.68
Earlington	G		.09								.42				T.			.77					.16										1.44
Hopkinsville	C										.10	.25						1.40										.70					2.45
Owensboro‡	O	T	T			T.				T.					.38			1.35									T.						1.73
Paducah	O		T.	T.																												T.	T.
Central Section.																																	
Alpha	C	.10	.30								.55				.90	1.90		.25									.26		.50				4.76
Anchorage	O									T.	.16				.23	.14	.28	1.03									.88	.20					2.92
Bardstown‡	S	.04													.14		.37	.47											.39				1.41
Bowling Green‡	G		T.								.35				.77		.10	1.00										.20	.90				3.32
Burnside‡	C		.60	T.											1.70	.58	.09	1.12	.09									1.30	T.				5.48
Cloverport‡	O	.01	T.								T.	.16			.29			.39											T.				0.85
Edmonton	G																																
Eubank	C		.12								.12				1.75	.22	.20	1.01	.68									.90		11			5.11
Frankfort	K	T.									T.	T.			.17		T.	.61									.44	.05	.02	T.			1.29
Franklin	G	07	.05							T	.97				.13	.40	.16	.78				T.				T.		.08	T.				2.64
Greensburg	G		.10												.75	T.	.01	.83	1.53	.04								.26		.30			3.82
High Bridge	K		.03									.26			.40		.65	.50										.15	.54	.01			2.54
Irvington	O										.15				.20		T.	1.35									.25	1.31					3.26
Leitchfield	G	T.	05							.26	.18			.47			*	1.32								.08	.21						2.57
Lexington ***	K	.01								T.	T.	.01		.29		1.23	.44	.03								.40	.22	T.	T.				2.63
Loretto	S	.09	.03							.01	.12	T.			.53	1.04	.07	1.54	T.	T.							.05	.04	.06				3.58
Louisville***	O	.02								.07	1.25			.05		T.	1.04	.01								.15	T.						2.59
Do. (Cherokee Park)	O	T.			T.						1.03			.10		.07	T.	.99									.14						2.33
St. John‡	S	T.	.04									.14			.10		.04	1.95	.05								.03	T.	.30	.02			2.67
Scott	L	.21												.30	.66	.13	.16	.06									.28	.39	.05				2.24
Shelby City	K	.03	.06								.12			1.00		.45	.08	.51									.75	T.	.03				3.03
Shelbyville	S										T.				.47		.17	.67									.05			16			1.52
Taylorsville	S	T.	.02							T.	T.	.07			.81	.03	.32	.79								T	.07	.91	T.				3.02
Williamstown	L		T.									.42	T.		.56		T.	.93										1.43					3.34
Eastern Section.																																	
Beattyville	K		.14								.08	.06		.14	.84	1.60	1.30	.24										.30					4.70
Berea	K									.57					3.90	.70	.26	.23									2.24						7.90
Catlettsburg	B										.02				1.10	1.60		.04					T.				1.50	.06					4.32
Falmouth	L											.65			.45			.80					.17				.38	.02					2.47
Farmers	L									.50					1.18												.50						2.18
Hazard	K		1.01								.09				1.16	1.55	.55	.45	.08									.79					5.68
Jackson	K										.50				1.10	1.30		.50	.80									T.					4.20
London	C		.25											.50	1.60	.80	.91	.35										.24		.14			4.79
Louisa	B					.12									1.11	1.12	.05	.27	.09									.90					3.66
Manchester	K		.47												.85	.61	.97	.49									.26			.18			3.83
Maysville	O		T.								T.	.17	.45		1.43	.02	.04	.86									1.00	.02		.03			4.02
Middlesboro	C		.09												.47	1.01	.45	.67	.08								.40	.38	2.20				5.75
Mount Sterling	L	T.										.33	T.		.62	1.20	.18	.50										2.68					5.51
Pikeville	B		.58								.04			.46	1.00	.50	.32	.72	T.									.26					3.88
Richmond	K	T.	.10								.04	.03	T.		.50	.84	.25	1.13									T.	1.73					4.62
Weeksbury	B	.70	.10												.80	.60	.30	1.00									.50						4.00
Williamsburg	C		.05							.07	.05				.87	1.24	.15	.55										.98		.59			4.55

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

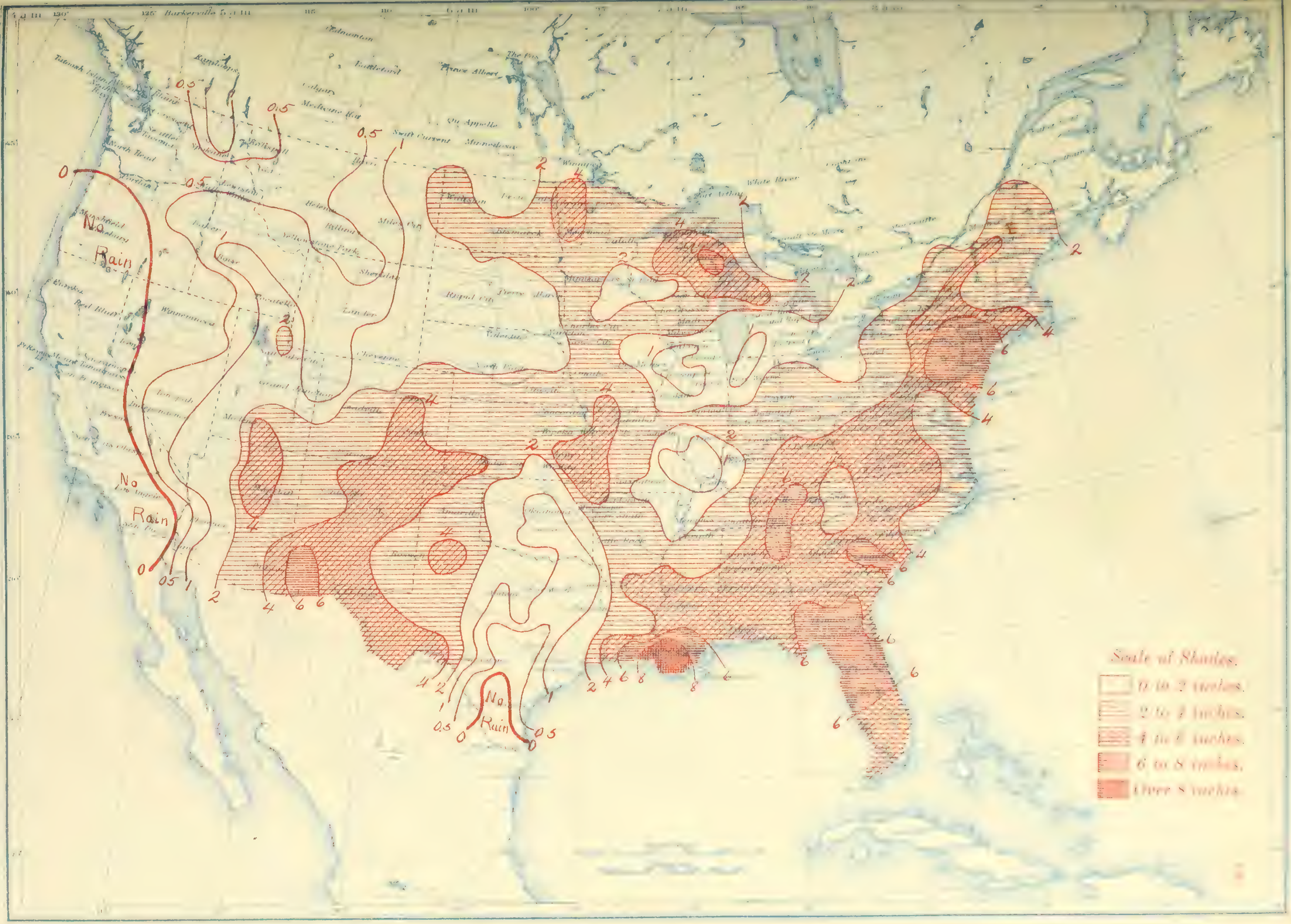
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for July, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	88	91	91	92	95	96	98	96	99	99	98	3	1	94	94	85	89	87	84	92	90	96	99	98	96	1	1	97	87	87	88	93.9
	Minimum	67	69	55	65	57	56	60	62	62	75	67	69	74	74	70	74	72	65	60	56	61	63	65	69	69	74	74	77	66	55	57	65.8
Blandville	Maximum	89	93	95	87	96	99	99	95	99	97	97	1	99	98	99	99	96	91	88	94	94	95	97	96	95	98	1	97	89	91	83	95.1
	Minimum	72	68	69	72	73	69	67	70	71	73	68	75	78	79	73	79	79	69	61	62	71	71	75	72	74	73	79	78	72	62	63	71.5
Calhoun	Maximum	87	92	91	94	96	97	1	97	3	4	2	6	3	97	98	94	92	90	86	96	93	99	2	1	99	2	5	99	92	91	92	96.8
	Minimum	69	68	63	67	61	62	61	65	70	73	67	71	76	76	69	73	74	64	58	56	65	65	68	71	70	76	76	78	65	60	63	67.7
Earlington *	Maximum	91	93	94	93	99	98	3	1	6	1	3	7	2	97	99	89	92	89	89	99	95	‡	3	2	1	3	5	1	92	93	93	97.8
	Minimum	63	62	56	63	56	57	58	61	65	67	65	72	74	77	73	77	72	64	58	52	62	65	67	71	75	76	75	75	65	54	60	65.7
Hopkinsville	Maximum	94	93	96	91	98	98	2	1	1	99	99	6	2	99	99	85	93	88	89	97	95	99	1	1	99	2	1	98	91	92	93	96.8
	Minimum	62	69	58	64	60	61	61	60	68	72	64	69	72	75	70	74	72	69	59	56	59	66	67	66	68	72	70	72	67	57	59	65.7
Owensboro *	Maximum	81	89	89	90	95	95	97	96	1	1	1	3	2	95	92	90	87	84	85	91	90	94	97	97	95	98	1	95	88	86	89	92.7
	Minimum	68	67	60	68	62	67	65	69	72	74	68	71	74	74	71	72	72	66	60	60	65	66	68	69	71	72	75	76	65	63	62	68.1
Central Section																																	
Alpha	Maximum	93	82	85	83	89	90	93	93	95	93	88	96	97	81	82	80	80	84	80	84	86	87	90	90	90	90	88	79	79	79	81	86.7
	Minimum	80	69	60	63	62	59	61	68	75	55	64	69	81	74	70	75	73	72	64	62	61	64	68	68	74	79	69	75	62	55	57	67.4
Anchorage	Maximum	86	90	90	93	95	95	97	99	2	1	‡	5	3	92	89	89	88	87	87	92	95	97	98	99	98	94	96	90	84	83	87	93.6
	Minimum	64	60	56	66	58	63	61	66	66	65	63	66	74	71	66	69	67	60	56	55	63	64	66	68	66	72	70	71	59	58	51	63.9
Bardstown *	Maximum	90	95	92	95	98	99	‡	3	4	3	2	7	2	97	88	87	88	91	89	97	99	99	2	2	4	‡	99	95	90	90	93	96.8
	Minimum	65	67	57	65	65	62	69	64	69	71	65	62	75	73	70	71	70	67	59	57	65	67	68	71	73	68	64	73	62	59	55	66.1
Bowling Green*	Maximum	95	93	93	92	97	98	‡	‡	1	95	1	4	‡	95	90	89	88	88	86	95	91	97	‡	99	99	98	96	93	88	88	89	94.8
	Minimum	60	67	62	64	62	61	61	65	67	64	65	69	73	72	69	69	68	69	58	58	61	65	67	68	71	73	70	70	62	55	58	65.3
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank*	Maximum	93	89	89	92	90	92	94	95	98	94	94	1	99	85	85	82	84	84	79	88	89	92	93	92	92	92	90	86	79	79	84	89.5
	Minimum	63	67	57	60	60	56	53	53	66	64	60	63	75	67	67	67	68	68	60	54	60	63	64	61	64	69	70	70	59	54	48	62.3
Frankfort	Maximum	88	89	89	93	94	93	93	99	98	98	98	3	1	1	94	91	90	93	90	94	95	97	97	99	1	99	98	91	90	85	86	94.4
	Minimum	65	66	58	65	60	60	59	62	68	71	66	68	71	72	70	70	69	66	59	58	66	66	67	71	70	72	71	72	61	59	53	65.5
Franklin	Maximum	98	87	89	90	93	94	98	99	98	91	1	1	96	91	92	85	85	85	81	88	90	92	97	96	96	99	97	90	84	83	85	92.0
	Minimum	73	70	64	67	67	65	66	61	75	69	69	78	72	74	72	73	70	73	62	62	65	67	73	73	76	76	73	74	66	59	61	69.2
Greensburg*	Maximum	99	93	92	96	96	98	‡	99	2	98	1	9	4	94	86	93	88	89	84	92	94	95	‡	99	‡	‡	95	93	96	87	88	95.5
	Minimum	65	68	56	63	59	56	55	60	62	67	67	65	72	68	69	68	66	68	59	56	61	64	66	64	66	72	74	74	62	52	51	63.6
Irvington	Maximum	85	88	90	92	91	94	96	97	‡	99	99	5	2	97	92	92	88	86	82	90	94	96	98	98	97	97	95	91	84	82	86	93.0
	Minimum	66	66	66	66	67	65	62	69	66	68	66	73	78	73	70	72	67	66	57	57	66	66	69	72	73	77	70	73	62	60	60	67.4
Leitchfield	Maximum	88	90	90	91	93	95	99	98	99	95	95	2	‡	92	90	88	86	86	83	84	93	95	98	97	97	97	97	94	85	85	88	92.6
	Minimum	68	66	58	68	65	61	61	66	67	70	65	69	74	71	70	71	67	68	58	58	64	65	68	68	71	72	72	76	63	59	56	66.3
Lexington	Maximum	81	85	86	88	87	88	90	94	95	94	95	‡	97	87	83	82	85	84	78	88	91	93	95	96	94	90	89	86	79	77	82	88.4
	Minimum	65	66	64	66	66	67	65	71	71	69	66	74	69	70	67	68	68	65	57	64	68	71	71	72	72	69	68	68	59	58	60	66.9
Loretto	Maximum	87	90	90	91	95	95	98	99	‡	99	98	4	‡	97	91	86	86	86	83	89	91	93	94	95	95	96	93	92	87	85	86	92.6
	Minimum	63	65	54	62	59	57	55	60	64	70	60	66	73	70	67	70	68	68	57	56	62	64	67	67	69	73	69	73	59	54	51	63.6
Louisville	Maximum	78	87	85	89	92	92	95	96	‡	98	98	2	‡	89	89	88	87	85	83	90	93	94	97	97	96	94	95	89	83	83	86	91.3
	Minimum	67	68	65	68	69	70	69	71	74	66	69	76	74	74	72	69	69	65	58	64	72	72	74	77	76	75	72	72	62	62	62	69.5
Do. (Cherokee Park)	Maximum	81	89	86	91	93	94	95	95	‡	97	96	‡	99	92	87	87	88	86	85	90	93	95	97	96	97	93	95	91	85	85	87	91.8
	Minimum	65	65	60	65	62	62	62	65	70	69	66	70	78	73	69	71	69	65	56	59	66	65	69	75	70	73	72	73	61	58	55	66.4
St. John *	Maximum	89	90	89	91	92	94	97	98	‡	98	98	5	2	95	87	92	90	86	81	91	93	94	‡	99	97	‡	97	92	89	85	88	93.5
	Minimum	62	66	66	65	60	60	59	63	63	68	63	66	72	73	68	69	65	66	56	56	62	64	66	66	68	71	70	72	60	58	56	64.5
Scott	Maximum	74	85	85	89	90	89	91	92	99	97	1	4	97	85	87	91	89	85	84	92	95	97	‡	99	98	92	92	85	82	82	87	90.8
	Minimum	62	64	59	63	60	61	59	60	65	67	67	67	72	69	67	69	70	63	55	61	69	65	71	76	71	71	57	69	57	56	53	64.4
Shelby City	Maximum	90	92	90	94	94	97	98	99	98	98	3	4	‡	94	87	83	86	88	84	93	97	99	99	98	‡	95	94	89	82	82	90	93.5
	Minimum	65	68	58	62	63	60	57	61	69	69	64	67	76	69	68	70	67	69	58	56	63	64	66	70	73	72	69	75	60	54	46	64.8
Shelbyville *	Maximum	84	91	90	94	95	96	99	‡	2	90	3	6	1	94	86	88	86	86	86	94	97	99	1	1	1	96	99	89	87	85	85	93.9
	Minimum	59	64	65	65	66	64	60	64	68	67	64	66	76	70	68	68	67	64	55	57	63	65	66	68	67	72	68	72	59	56	54	64.7
Taylorsville	Maximum	83	88	87	90	92	92	94	97	98	94	1	4	1	93	84	85	87	85	83	91	92	94	97	98	98	95	96	88	82	83	86	91.5
	Minimum	63	66	53	62	56	56	55	59	69	68	62	65	70	72	71	70	68	67	56	56	63	63	66	66	65	72	70	73	62	55	52	63.6
Williamstown *	Maximum	77	81	89	92	93	92	95	97	‡	98	97	4	96	87	86	88	86	84	86	90	93	96	97	98	78	99	94	87	87	82	90	90.9
	Minimum	59	62	62	61	61	65	63	66	69	68	66	69	74	69	67	68	68	62	57	53	64	59	60	65	65	63	65	60	46	43	47	62.1
Eastern Section.																																	
Beattyville *	Maximum	96	64	63	99	98	98	‡	2	4	96	3	7	4	87	85	85	85	96	83	93	94	94	98	96	‡	94	96	90	84	83	89	94.4
	Minimum	60	64	54	57	57	54	52	55	59	63	60	63	66	67	65	67	69	69	57	53	58	63	63	63	63	63	66	66	52	49	46	60.1
Berea	Maximum	89	89	87	80	90	91	99	99	99	99	99	3	99	91	94	92	89	81	86	91	91	95	95	95	96	93	91	85	80	79	84	91.0
	Minimum	67	67	57	60	59	56	55	63	68	69	65	68	79	68	67	69	69	69	70	54	61	64	64	70	71	69	67	74	60	51	49	64.5
Farmers	Maximum	91	90	90	90	90	92	96	98	99	95	98	4	98	96	88	90	84	90	81	90	95	95	98	98	‡	94	90	86	82	82	87	92.2
	Minimum	52	50	47	59	60	54	52	51	55	63	65	61	68	70	68	67	60	56	65	52	58	60	60	62	64	70	65	62	54	46	46	58.8
Maysville*	Maximum	82	90	90	94	93	94	97	‡	‡	1	2	4	‡	90	88	94	91	88	85	94	96	99	1	1	1	89	96	87	84	84	87	93.6
	Minimum	57	62	55	61	56	56	56	56	62	65	61	62	71	67	67	67	68	64	56	57	64	62	64	68	67	69	64	67	58	51	51	61.6
Middlesboro	Maximum	93	82	86	86	88	89	90	90	86	88	94	98	95	93	80	80	80	85	82	85	86	89	91	90	92	90	87	84	80	78	79	87.0
	Minimum	62	64	61	60	60	52	52	57	60	60	60	63	65	68	65	66	68	71	58	55	58	63	64	55	61	67	65	62	62	55	57	61.2
Mount Sterling*	Maximum	82	87	95	94	94	96	98	96	97	94	92	4	98	98	88	86	89	88	84	90	93	96	96	97	89	93	89	87	82	82	86	91.6
	Minimum	60	66	58	67	63	60	59	62	68	70	64	67	75	69	66	68	70	69	58	58	65	65	66	68	69	67	73	61	59	54	53	64.4
Richmond *	Maximum	88	89	87	91	92	93	94	99	97	97	1	4	99	83	86	84	84	87	83	90	92	96	96	97	98	96	92	88	84	83	85	91.5
	Minimum	67	68	63	66	64	64	61	66	71	70	66	70	77	70	68	69	68	68	59	60	66	68	69	70	72	72	69	70	60	56	56	66.5
Weeksbury	Maximum	94	84	87	88	87	86	90	95	95	94	97	1	99	94	88	87	88	90	83	89	89	96	95	96	95	84	95	86	83	78	83	90.2
	Minimum	60	65	59	61	59	56	57	59	64	63	61	64	71	70	66	67	69	68	59	53	59	61	64	67	65	58	66	71	57	50	48	61.8
Williamsburg*	Maximum	97	91	91	93	90	94	98	95	88	91	94	1	1	88	87	85	96	92	90	94	90	92	99	98	97	98	94	91	84	82	81	92.3
	Minimum	62	62	57	59	55	51	52	58	60	62	61	64	69	67	66	68	68	70	64	52	59	62	65	59	61	66	64	72	60	53	49	61.2

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs. ‡100.
1, 101; 2, 102; 3, 103; etc.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
0
0.5
1
2
4
6
8
Barkerville
Kamloops
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Qu Appelle
Swift Current
Minnedosa
Winnipeg
Port Arthur
White River
Spokane
Kalispell
Helena
Billings
Miles City
Bismarck
Moorhead
Duluth
Yellowstone Park
Sheridan
Baker
Boise
Pocatello
Lander
Rapid City
Pierre
Huron
Cheyenne
North Platte
Valentine
Winnemucca
Eureka
Red Bluff
Roseburg
North Head
Portland
Grand Junction
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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

LIMATOLOGICAL DATA

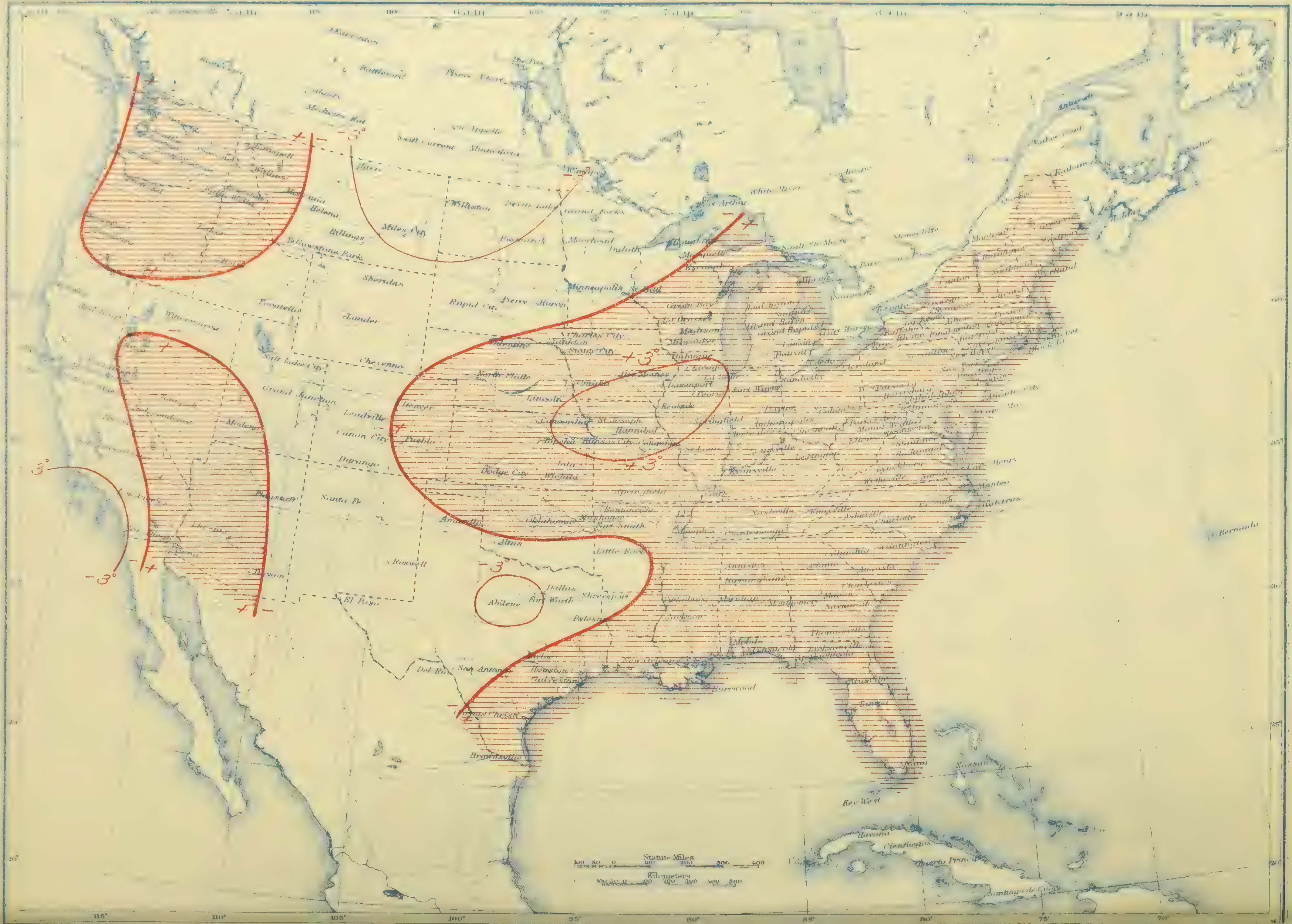
KENTUCKY SECTION

AUGUST, 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 20, 1914

Departure of the Mean Temperature from the Normal, August, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XIX. Louisville, Ky., August, 1914. No. 8

GENERAL SUMMARY.

The severe drought that prevailed during June and July continued through the first week of August, but was effectually broken in all parts of the State by the generous rains of the second week. These rains occurred daily in moderate to heavy showers from the 9th to 12th, inclusive, and again on the 14th. For this reason the run-off was not great, the soil absorbing most of the water and vegetation receiving the maximum benefit. Good rains also occurred daily at nearly all stations during the period 25-29th. Day temperatures were comparatively high during most of the month and sunshine was sufficient. During the last two decades conditions were exceptionally favorable for plant growth. Pastures revived and all late crops improved rapidly, being in excellent condition at the end of the month.

PRESSURE.

Several shallow depressions passed over the State during the month, the most important being those of the 9-11th and the 25-29th. Areas of high pressure of moderate strength dominated the weather on most days.

The mean sea-level pressure, computed from two stations, was 30.03 inches. The highest was 30.18 inches at Louisville on the 12th and at Lexington on the 13th, and the lowest 29.82 inches at Louisville on the 28th.

TEMPERATURE.

The mean for the State, determined from the records of 35 stations, was 76.0°, the average daily excess being 0.3°. Temperatures of 90° and over occurred generally over the State during the periods 1st-8th and 16-24th, but most of the nights were cool. The highest temperature was 100° at Earlington on the 2nd, 6th and 7th, at Beattyville on the 20th, and at Bowling Green on the 14th. The lowest temperature was 49° at Beattyville on the 1st, and at Eubank and Farmers on the 16th.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 78 per cent and at 7 p. m. 62 per cent.

PRECIPITATION.

From the reports of 46 stations, the average amount for the month was 5.94 inches, which is 2.59 inches above normal. This is the largest average rainfall for August since State records were established, with the exception of August, 1890, when it was 6.16 inches. The heaviest rainfall occurred over the extreme northern and the southeastern counties, where the total monthly amount ranged between 6 and 10 inches. It was also over 6 inches in the counties bordering on the lower portion of the Tennessee and Cumberland rivers. Over the remainder of the State the monthly amount ranged generally between 4 and 6 inches. The amounts at the various stations ranged between 2.86 inches at Franklin and 10.29 inches at Alpha. Rainfalls of 1 and 2 inches occurred at several stations on the 11th, and again on the 25th, 26th and 28th.

WIND.

The total wind movement at Louisville was 6767 miles and at Lexington 5541 miles, the average hourly velocity being 9.1 and 7.4 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 40 miles per hour from the northwest on the 24th, and at Lexington 30 miles per hour from the southwest on the 10th.

SUNSHINE AND CLOUDINESS.

The precentage of possible sunshine for the month at Louisville was 64 and at Lexington 56.

MISCELLANEOUS.

Thunderstorms were frequent in the central part of the State, but there were only a few reports of damage.

August 3.—At Bowling Green a barn was destroyed and a horse killed by lightning, and hail caused considerable damage to windows.

August 5.—Two barns were destroyed by lightning in Hardin County.

August 24th.—A barn and contents were destroyed by lightning near West Point.

The streams of the State were at very low stages during the first half of the month, the Ohio River at Cloverport reaching a stage of 1.5 feet on the 11th, which is the lowest water ever known at that place. The rains of the 25th-29th produced good stages in the smaller streams, and improved conditions somewhat in the Ohio.

ERRATA.

July, 1914.—Williamstown, total precipitation should be 3.31 inches and departure 1.10 inches.

Comparative data for August.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	70.6	−5.1	100	43	1.23	−2.12
1890	73.2	−2.5	101	44	6.16	+2.81
1891	72.9	−2.8	105	43	5.82	+2.47
1892	75.4	−0.3	96	45	3.13	−0.22
1893	74.8	−0.9	99	48	1.72	−1.63
1894	77.1	+1.4	105	41	3.02	[illegible]
1895	76.6	+0.9	102	49	2.15	−1.20
1896	77.1	+1.4	105	41	2.83	−0.52
1897	75.2	−0.5	101	49	2.33	−1.02
1898	76.7	+1.0	100	55	3.83	+0.48
1899	78.1	+2.4	102	51	3.09	−0.26
1900	80.4	+4.7	104	52	2.74	−0.61
1901	75.5	−0.2	101	50	5.12	+1.77
1902	75.6	−0.1	103	45	2.48	−0.87
1903	75.5	−0.2	100	49	3.27	−0.08
1904	75.2	−0.5	100	45	2.64	−0.71
1905	75.7	0.0	[illegible]	42	3.82	+0.47
1906	77.4	+1.7	99	45	4.37	+1.02
1907	74.8	−0.9	[illegible]	48	4.27	+0.92
1908	76.3	+0.6	104	49	2.79	−0.56
1909	76.9	+1.2	104	45	2.60	−0.75
1910	74.0	−1.7	100	46	2.72	−0.63
1911	76.2	+0.5	106	45	4.03	+0.68
1912	77.7	+2.0	98	43	4.71	+1.36
1913	78.0	+2.3	108	44	2.81	−0.54
1914	76.0	+0.3	100	49	5.94	+2.59

Climatological data for August, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	76.7	+ 0.3	96	19	54	1†	39	3.52	+ 0.14	0.77	0	9	17	4	10	S	W. T. Austin.
Blandville	Ballard	445	32	78.4	+ 1.6	96	2†	61	30	31	3.51	+ 0.49	1.23	0	12	8	10	13	SW	E. W. Horr.
Calhoun	McLean	393	11	78.5	+ 0.8	99	6	58	16	39	4.49	+ 1.34	1.60	9	13	4	22	5	SW	W. A. Taylor.
Earlington	Hopkins	370	24	79.4	+ 2.8	100	2†	55	5	43	5.46	+ 2.14	1.10	0	10	14	3	14	S	Brick Southworth.
Hopkinsville	Christian	524	18	77.4	− 0.8	99	2	56	16	39	6.09	+ 3.40	0.90	0	14	11	0	20	E	W. F. Randle.
Owensboro	Daviess	479	17	77.0	+ 0.3	96	7	59	6†	36	4.32	+ 1.48	1.78	0	10	10	8	13	S	Henry S. Berry.
Paducah	McCracken	341	25	......	......	......	......	......	......	....	6.59	+ 3.63	2.10	0	9	....	....	....	......	S. A. Fowler.
Central Section.																				
Alpha	Clinton	......	20	74.6	− 1.5	89	20	53	16	30	10.29	+ 5.96	3.40	0	11	14	5	12	W	W. W. Hicks.
Anchorage	Jefferson	700	13	66.0	+ 1.2	98	6	51	1	37	8.49	+ 5.74	3.62	0	14	19	8	4	SW	C. E. Barret.
Bardstown	Nelson	637	17	78.6	+ 1.0	99	6†	55	16	39	3.60	+ 0.19	1.22	0	10	16	6	9	SE	Thos. S. Talbott.
Bowling Green	Warren	560	25	77.2	− 1.7	100	14	55	16	40	4.48	+ 1.02	1.25	0	11	14	7	10	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	....	8.64	+ 4.53	2.08	0	14	....	....	....	......	K. W. Massey.
Cloverport	Breckenridge	......	0	......	......	......	......	......	......	....	4.46	......	0.86	0	11	....	....	....	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......	......	......	......	......	......	....	......	......	......	....	....	....	....	....	......	Miss Lee Ray.
Eubank	Pulaski	1177	20	73.8	0.0	93	20	49	16	38	6.22	+ 2.27	1.68	0	11	11	8	12	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	74.6	- 0.1	94	1†	56	5	37	6.35	+ 2.93	1.89	0	10	17	5	9	S	Geo. L. Barnes
Franklin	Simpson	691	20	78.6	+ 1.5	98	19†	60	30	29	2.86	− 0.44	1.03	0	7	1	29	1	S	J. E. Newman.
Greensburg	Green	581	22	76.8	+ 1.2	99	20†	51	1	43	7.22	+ 3.58	1.85	0	14	6	6	19	SE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	......	......	......	......	......	......	....	5.80	+ 2.45	1.15	0	13	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	......	16	76.2	− 0.1	94	19	58	1†	31	5.10	+ 1.73	1.60	0	11	18	4	9	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	75.4	+ 0.9	95	6	55	16	36	6.99	+ 3.88	1.92	0	10	9	16	6	SW	John E. Stone.
Lexington	Fayette	989	26	74.8	+ 0.2	91	19	60	30	28	4.69	+ 1.12	1.77	0	12	12	10	9	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	75.6	− 0.1	94	6	53	16	38	4.57	+ 1.32	1.76	0	16	12	6	13	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	77.3	+ 0.8	95	6	62	16	27	6.97	+ 3.46	2.38	0	14	9	8	14	S	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	......	4	76.4	......	95	6	58	1†	33	10.14	......	3.75	0	12	11	12	8	SW	Wm. I. Hunt.
St. John	Hardin	777	18	75.2	+ 0.4	96	7	53	1†	40	5.17	+ 2.23	0.95	0	13	11	8	12	......	Sisters of Loretto.
Scott	Kenton	......	16	75.7	+ 0.3	98	6	57	15	38	6.47	+ 3.56	1.78	0	11	13	11	7	S	E. B. Wilson.
Shelby City	Boyle	1087	20	76.6	+ 2.3	98	19†	53	16†	42	5.86	+ 2.73	1.76	0	13	16	8	7	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	74.8	− 0.7	97	6	56	1†	38	6.51	− 3.48	1.55	0	10	14	7	10	S	C. R. Burnett.
Taylorsville	Spencer	489	12	74.8	+ 0.3	95	23	52	16	37	5.09	+ 1.71	1.52	0	14	9	9	13	S	E. D. Bourne.
Williamstown	Grant	943	11	72.8	- 1.2	96	6	50	1†	45	9.16	+ 5.94	2.70	0	12	11	13	7	......	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	75.4	+ 0.5	100	20	49	1	46	4.12	− 0.65	0.92	0	10	12	5	14	SW	G. W. Cann.
Berea	Madison	1070	13	75.3	+ 0.8	95	19	51	16	36	5.36	+ 0.77	2.00	0	7	15	3	13	SW	C. F. Rumold.
Catlettsburg	Boyd	534	25	......	......	......	......	......	......	....	4.54	+ 0.89	1.04	0	10	....	....	....	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	......	......	......	......	......	......	....	6.29	+ 2.85	1.84	0	11	19	4	8	S	J. V. Oldham.
Farmers	Rowan	668	8	74.4	......	96	6	49	16	43	5.25	......	1.40	0	10	22	2	7	......	Lee Craycraft.
Hazard	Perry	......	0	......	......	......	......	......	......	....	5.27	......	1.26	0	12	....	....	....	......	Kelly E. Watts.
Jackson	Breathitt	......	4	......	......	......	......	......	......	....	......	......	......	....	....	....	....	....	......	H. R. Lafon.
London	Laurel	......	0	......	......	......	......	......	......	....	8.18	......	1.54	0	14	18	3	10	SE	C. R. Lee.
Louisa	Lawrence	......	2	......	......	......	......	......	......	....	4.55	......	1.30	0	12	....	....	....	......	Lucien S. Johnson.
Manchester	Clay	......	3	......	......	......	......	......	......	....	6.86	......	1.30	0	11	....	....	....	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	75.4	− 0.7	98	6	53	1	41	6.90	+ 3.25	2.00	0	12	15	7	9	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	73.3	− 1.1	90	19†	53	1	32	7.83	+ 4.30	2.60	0	15	17	12	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	75.8	+ 1.9	95	20	55	16	34	4.78	+ 0.84	1.42	0	9	c	10c	6c	W	H. Clay McKee.
Pikeville	Pike	......	6	......	......	......	......	......	......	....	4.88	......	1.54	0	12	....	....	....	......	I. M. Williams.
Richmond	Madison	926	22	76.8	+ 1.2	95	19†	58	16†	32	5.89	+ 2.69	1.90	0	13	15	8	8	S	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	74.4	......	96	20	52	1†	39	6.18	......	1.70	0	13	17	0	14	......	O. A. Lund.
Williamsburg	Whitley	939	18	76.2	− 0.1	98	19	52	1†	40	7.48	+ 2.96	1.73	0	12	11	5	15	E	N. C. Jones.
State averages and extremes				76.0	+ 0.3	100	2†	49	1†	46	5.94	+ 2.59	3.75	0	12	13	8	10	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc.

* Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for August, 1914.

Stations	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Section																																
Beaver Dam G									T.	.38	.48	.77									[illegible]	[illegible]				[illegible]			.11			3.32
Blandville M									.06	.68	.55			[illegible]						.01		[illegible]			[illegible]				.05	T.		3.51
Calhoun G							T.	.85	.12	.12	1.60	.02		.05							T			.06	[illegible]	[illegible]	[illegible]	[illegible]	.05			4.19
Earlington G			T						1.08	.27	.62	1.10									[illegible]					[illegible]			.58			[illegible]
Hopkinsville C				.64					.90	.75	.50	.20		[illegible]						.05	[illegible]				[illegible]	[illegible]	[illegible]	.75	.43			[illegible]
Owensboro O				T					.32	.07	.55	.90		.10							.10	T.			.38	.08		[illegible]	[illegible]	T		4.32
Paducah O									T.	.60	2.10			.04							.10				1.80	1.20	.15	.50	.10			6.59
Central Section.																																
Alpha C			.15					.07	1.05		.85	T.		.20							.52			.90	1.75	.75	3.40	.65	T.			10.29
Anchorage O									.10	.16	3.62	.07		.57						.28	.53			[illegible]	.70	.03	.19	1.36	.32		[illegible]	[illegible]
Bardstown S										.15	.40	.78		.19								.06		[illegible]	.40	.13		.20	1.22			3.60
Bowling Green G				1.06					.20	.18	.07	.02										.18			.52	1.25	.42	[illegible]	[illegible]			4.48
Burnside C				T.					.34	[illegible]	.05	.97	.05	.08	.47							[illegible]			1.62	2.08	[illegible]	.70	[illegible]			[illegible]
Cloverport O				.07				.04	.13	.09	.27	.35		T.							.75				.64	.39		.86	[illegible]	T		[illegible]
Edmonton G																																......
Eubank C				.72					.06	1.01	.10	.38	.08												1.65	[illegible]	.43	.42	.30			6.22
Frankfort K									.43	.05	.15	1.07		[illegible]						T		.03			.96	1.35	T.	.27	[illegible]			6.35
Franklin G			T			T		T.	1.03	.37	.30			T											.35	.43	.20				.18	2.86
Greensburg G				.05					.15	1.17	.21	.24	.02	.35	.10										1.58	1.85	.35	[illegible]	[illegible]	[illegible]		7.22
High Bridge K									.37	1.15	[illegible]	.58		.28							.35	.27			.82	[illegible]	.01	[illegible]	[illegible]	[illegible]		5.80
Irvington O			T			T.	T.	T	.29	.25	.49			.30						.22	[illegible]				1.60		.35	.38	.72		.42	[illegible]
Leitchfield G			.02					T.	.27	.31	1.40		T						1.05					.80	.26		1.92	[illegible]			[illegible]	6.99
Lexington *** K								T.	.76	.08	.64	.17	.62	.01						T	T			.81	.97	.02	.21	.16	.24			4.69
Loretto S			.04				T.		.25		1.76	.07	.02	.17	T					.25	.37			.20	.78	[illegible]	.15	[illegible]	[illegible]	[illegible]	[illegible]	4.57
Louisville *** O		T				T.	.21		.07	1.18	1.21		.67							.68	[illegible]			[illegible]	.56	[illegible]	1.33	.79	.03		[illegible]	6.97
Do (Cherokee Park) O							T		.50	[illegible]	[illegible]	[illegible]		.80						.21	.11			.14	1.05			1.15	1.33		[illegible]	10.14
St. John S				.15					.08	.26	.27	.83	T.	.70	.01						.71	T			.36	.14	.06	.68	.95			5.17
Scott L							T		.72	.15	.93	.03		.13						T	.61			.78	.98	.01		1.78	.35		T	6.47
Shelby City K			.57			T.		.19	1.05	.10	.75	.05		.58							.13			.02	1.76	.30	.26	T.	.10			5.86
Shelbyville S								T	.10	.06	.55	.58		.48							T	.28			1.05	1.16		.70	1.55			[illegible]
Taylorsville S							T.	T.	.10	.21	.78	.45	T.	.06					T.	.11	.12			.64	.42	.21	.02	.39	1.52		.06	5.09
Williamstown L									.60	.13	.76	.84		.10						T.	.19	.04			2.70	1.07		.98	1.70	.05		9.16
Eastern Section.																																
Beattyville K										.90	.04	.92		.50	.06										.26	.92	.12	.14	.26			4.12
Berea K			T.						1.32	.67	.65										.79	.25	T	T	2.00		T	T	.28			5.36
Catlettsburg B							.06			.16		1.04		.52								[illegible]			1.02	.42		.12	.18	.12		4.54
Falmouth L								.06	.75	.19	1.12	.55		.05								.07			.65	.63		.38	1.84			6.29
Farmers L									.45		1.15	.05		.85						.25				.48	1.40	.05	.07	.50				5.25
Hazard K				.76				.39		.27	.05	.24	T.	.21	.12									.30	.60	.52	.52	1.26	T.			5.27
Jackson K																																
London C				.19			.27		.17	.96	.16	1.51	.22		.64										.89	1.24	.74	.84	.22	.10		8.18
Louisa B			.20					.10		.20	.30	.75		.05								1.15			.28	1.30		.05	.12	.05		4.55
Manchester K			.02	.76						.97			.68		.87										1.30	.47	.89	.54	.34	.02		6.86
Maysville O									.10	.69	.12	2.00		.13							.32	.17			.70	1.43		.18	.96	.16		6.90
Middlesboro C		.35	.05					.52	.62	.08	.80	.03	.15	.08										.50	.50	2.60	.95	.45	.15			7.83
Mount Sterling L							.40		T.	.47	.40	.61		.35											.48	1.42		.35	.30	T		4.78
Pikeville B						.06			.10	.26	T.	1.16	.46		.12							.24			.08	1.54	.16	.38		.32		4.88
Richmond K				.02					T.	[illegible]	.10	.78	.01	.03	.13							.35			.48	1.58	.04	.09	.08			5.89
Weeksbury B			.95				.10	.20	.10		.20			.70										.20	1.70	.60	.95	.30	.08	.10		6.18
Williamsburg ‖ C				.13			.26			.08	.03	1.73	.22	T.	.10									T.	1.60	1.05	.96	1.22	T.	.10		7.48

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

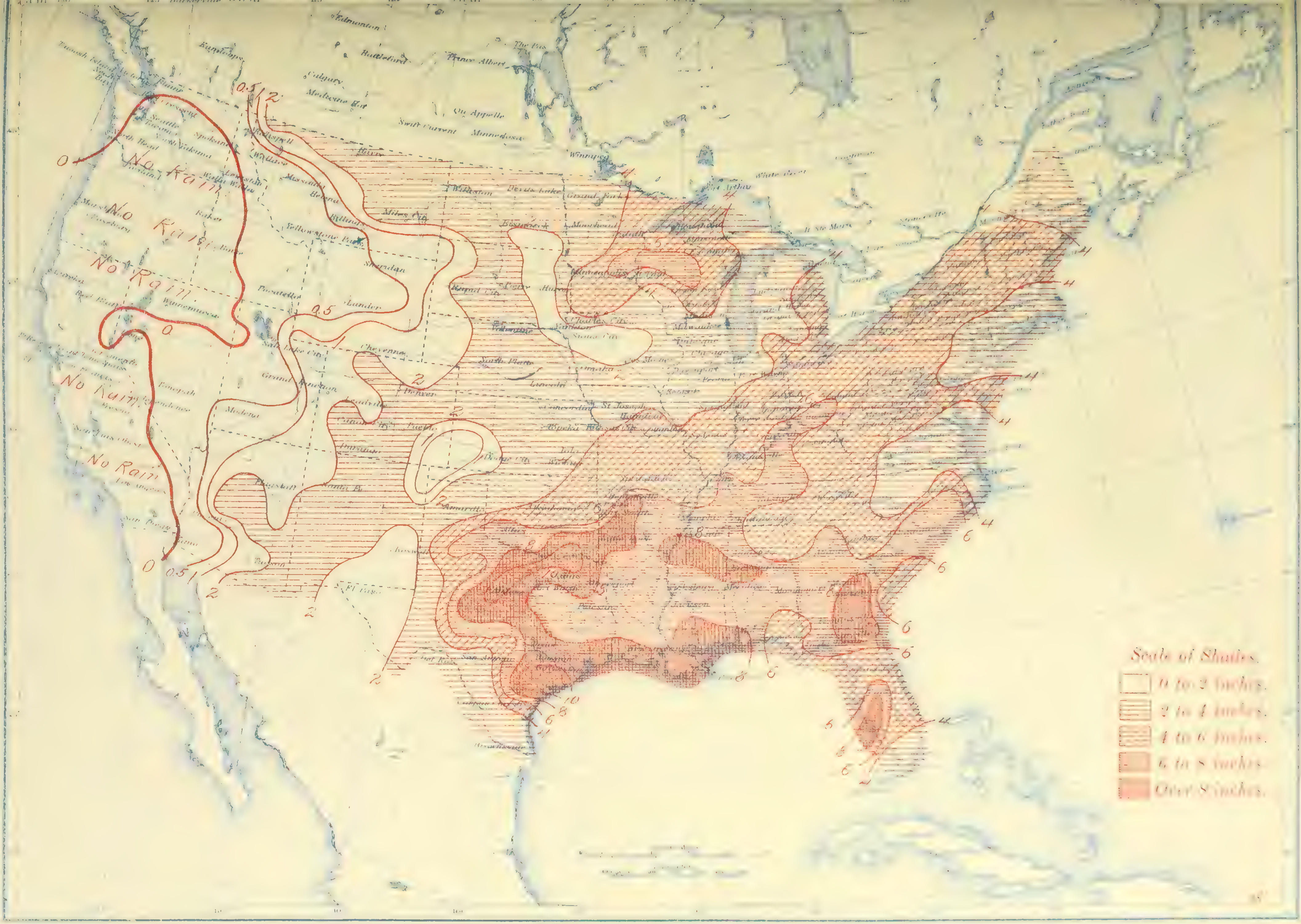
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	93	95	90	91	93	95	95	90	79	83	79	85	86	87	86	90	94	95	96	94	89	91	95	93	86	83	83	83	75	78	83	88.2
	Minimum	54	59	66	60	54	58	73	69	70	60	71	70	67	69	58	55	61	64	70	71	70	63	68	69	71	70	72	70	67	59	64	65.2
Blandville	Maximum	92	96	91	93	96	96	95	88	84	80	77	85	85	87	86	90	90	93	93	90	93	93	92	92	87	78	78	79	75	73	88	87.6
	Minimum	63	72	71	62	67	69	72	70	69	69	72	68	71	64	64	64	67	71	73	75	72	73	72	75	71	70	72	69	66	61	68	69.1
Calhoun	Maximum	96	98	95	95	96	99	98	93	81	84	80	87	87	83	89	93	92	94	95	92	95	96	96	96	86	84	87	82	80	79	88	90.2
	Minimum	61	67	69	61	61	60	71	68	69	70	70	69	68	68	59	58	62	68	69	73	70	66	68	75	72	69	71	69	64	61	66	66.8
Earlington *	Maximum	98	100	96	98	98	100	100	92	81	85	81	90	90	89	91	98	96	97	98	97	94	98	99	98	90	82	85	84	79	77	91	92.0
	Minimum	69	62	70	60	55	60	72	71	68	71	72	70	68	67	57	57	61	69	71	76	70	63	65	75	72	70	70	70	65	59	71	66.7
Hopkinsville	Maximum	96	99	94	93	95	97	96	91	80	87	83	87	88	87	89	95	94	96	98	95	93	97	98	95	91	82	83	81	74	73	87	96.1
	Minimum	63	67	68	61	58	61	62	68	67	68	69	68	68	68	58	56	57	62	67	69	69	63	64	70	71	72	69	65	61	57	59	64.7
Owensboro *	Maximum	92	93	92	92	94	95	96	90	81	86	79	85	85	86	86	88	90	91	92	89	91	91	94	90	84	82	81	81	75	78	84	87.5
	Minimum	60	62	66	63	64	59	71	69	69	69	71	69	64	68	59	59	60	67	70	72	70	70	67	73	72	67	67	70	65	61	66	66.4
Central Section.																																	
Alpha	Maximum	84	84	77	83	86	85	87	85	76	82	78	74	80	79	82	83	85	86	88	89	82	85	87	89	85	78	73	80	72	73	76	81.7
	Minimum	56	70	69	59	60	70	69	71	71	72	74	71	69	72	64	53	56	60	66	67	72	64	75	76	74	71	70	71	70	60	67	67.4
Anchorage	Maximum	90	93	92	90	93	98	93	93	82	91	79	83	87	86	86	90	92	93	96	91	88	89	95	90	75	83	87	83	76	83	78	87.9
	Minimum	54	61	65	63	56	66	71	65	69	70	70	66	61	63	55	55	56	66	68	70	68	68	68	70	67	65	63	68	63	65	61	64.4
Bardstown *	Maximum	96	97	95	95	96	99	97	93	78	90	78	86	92	90	91	93	95	97	99	97	95	96	98	96	88	87	85	85	73	83	79	90.9
	Minimum	57	67	68	62	58	67	72	69	71	69	70	70	63	66	59	55	61	66	70	73	69	63	68	74	70	69	70	70	70	58	63	66.4
Bowling Green*	Maximum	93	96	90	89	92	95	95	86	79	85	85	86	88	100	93	94	95	98	99	99	92	96	98	97	92	80	84	85	79	77	85	90.4
	Minimum	63	65	66	59	57	58	65	68	68	66	67	69	66	68	59	55	58	58	64	70	67	63	63	71	68	66	68	66	66	59	62	64.1
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank*	Maximum	87	88	85	84	89	89	91	88	85	84	79	79	84	83	82	85	89	90	92	93	86	89	91	91	86	80	83	83	75	80	82	85.5
	Minimum	51	53	64	55	76	63	66	68	69	67	69	69	61	65	57	49	51	60	63	63	65	60	60	63	66	68	70	68	68	56	58	62.0
Frankfort	Maximum	94	93	94	94	91	89	87	86	84	84	80	77	79	82	81	80	85	86	87	90	83	84	88	89	74	75	81	82	81	77	77	84.3
	Minimum	57	65	65	65	56	63	69	67	70	70	71	66	62	65	59	57	58	64	69	71	69	65	64	71	69	66	65	69	65	59	62	64.9
Franklin	Maximum	92	95	89	89	93	97	94	85	77	82	83	82	83	87	85	90	95	96	98	98	90	95	98	96	91	85	83	84	74	76	81	88.5
	Minimum	63	72	70	63	64	72	72	72	69	70	71	71	69	71	64	61	66	70	73	75	70	67	74	74	70	71	71	69	64	60	66	68.8
Greensburg*	Maximum	94	97	91	92	96	98	97	89	74	92	82	84	86	89	87	87	93	95	96	99	93	96	98	99	88	79	96	84	71	79	80	89.7
	Minimum	51	61	61	60	54	63	67	68	70	65	69	69	65	68	60	52	55	60	66	67	67	61	63	70	68	71	70	69	69	59	63	64.0
Irvington	Maximum	89	90	90	88	90	92	93	91	79	86	80	81	86	86	82	86	90	92	94	92	87	87	93	91	86	82	82	82	77	80	80	86.7
	Minimum	58	68	68	64	62	65	73	68	70	70	70	69	66	62	60	58	65	67	72	75	68	63	66	66	66	65	65	66	66	59	60	65.8
Leitchfield	Maximum	92	93	90	91	93	95	94	86	78	85	78	83	86	86	84	88	92	93	94	92	88	90	93	92	86	81	80	82	77	77	80	87.1
	Minimum	56	66	66	60	60	60	69	69	70	68	70	70	65	69	61	55	61	65	71	71	70	63	68	72	70	69	70	69	63	59	65	65.8
Lexington	Maximum	88	88	88	86	90	91	88	89	75	84	76	77	84	85	80	83	88	89	91	90	84	85	91	88	78	80	81	81	71	79	80	84.1
	Minimum	61	67	68	63	62	66	70	69	68	67	69	65	62	65	61	60	64	66	69	71	68	64	68	69	66	65	67	68	61	60	62	65.5
Loretto	Maximum	91	92	88	91	92	94	91	90	82	87	81	82	85	86	84	86	89	91	93	93	87	89	91	89	85	80	85	83	81	79	78	86.9
	Minimum	51	65	66	57	54	65	71	66	70	69	70	70	61	66	58	53	57	62	68	71	67	61	64	72	68	69	71	69	64	56	61	64.4
Louisville	Maximum	90	93	89	88	90	95	91	90	78	85	78	84	86	86	85	89	91	92	94	90	88	88	93	90	73	81	87	81	75	80	77	86.4
	Minimum	66	71	70	67	65	69	71	70	71	70	71	69	65	66	64	62	69	73	76	70	71	66	70	73	66	66	67	68	64	62	65	68.2
Do. (Cherokee Park)	Maximum	90	93	91	90	91	95	92	91	83	88	80	83	86	85	81	88	90	92	93	88	88	87	92	89	76	81	44	82	78	80	77	86.7
	Minimum	58	64	67	62	58	62	73	67	71	70	77	69	63	66	59	58	63	66	71	72	70	63	66	73	68	66	66	69	65	60	64	66.0
St. John *	Maximum	93	94	91	89	91	96	93	89	78	85	80	82	85	88	84	86	91	94	94	94	88	89	93	93	85	81	79	81	73	79	79	87.0
	Minimum	53	58	65	60	57	60	63	65	67	68	69	70	63	64	58	53	56	61	63	70	68	63	65	71	69	67	67	69	67	57	61	63.5
Scott	Maximum	93	92	87	86	89	98	93	93	82	88	77	80	84	88	86	86	91	92	95	90	88	89	94	87	74	80	84	79	77	79	80	86.5
	Minimum	59	65	65	62	60	60	73	67	67	70	70	63	63	64	57	59	64	70	73	73	70	62	66	71	63	62	61	67	63	59	63	64.9
Shelby City	Maximum	94	93	84	87	92	93	97	92	76	88	79	78	89	90	87	91	95	96	98	98	90	93	95	93	83	79	84	85	78	83	82	88.6
	Minimum	56	63	65	60	58	68	69	69	69	68	70	69	62	66	60	53	53	62	67	69	65	70	65	72	67	70	70	70	64	56	62	64.7
Shelbyville *	Maximum	94	95	85	88	92	97	87	88	81	84	76	83	87	86	83	88	91	91	93	89	85	88	92	87	71	78	82	82	68	78	86	85.6
	Minimum	56	62	66	62	57	63	70	67	67	68	68	65	63	64	57	56	57	63	67	71	68	62	68	69	68	65	64	67	68	57	57	63.9
Taylorsville	Maximum	89	91	90	88	90	94	87	91	82	88	79	81	86	87	82	86	91	92	94	93	87	89	95	86	76	80	83	83	73	81	80	86.3
	Minimum	53	62	64	57	53	59	67	63	71	67	71	69	62	65	56	52	56	60	66	70	68	61	62	71	70	67	68	70	65	56	61	63.3
Williamstown *	Maximum	91	93	91	90	93	96	91	92	87	88	78	81	83	82	85	90	90	91	94	89	89	87	93	88	74	82	85	81	70	79	81	86.6
	Minimum	50	50	54	51	50	51	58	57	58	59	58	54	53	53	16	47	54	58	69	72	68	61	67	69	66	62	64	67	67	52	60	58.2
Eastern Section.																																	
Beattyville *	Maximum	95	93	91	90	88	98	95	95	82	88	79	80	90	88	85	88	95	96	95	100	88	86	94	98	88	80	88	85	78	85	87	89.3
	Minimum	49	54	60	58	52	61	58	64	67	67	67	68	59	64	62	51	53	54	60	62	65	66	66	59	67	68	69	68	68	59	58	61.4
Berea	Maximum	90	87	89	85	90	91	90	92	79	85	79	79	86	87	87	85	90	90	95	94	85	88	92	87	86	87	86	83	80	81	83	86.7
	Minimum	54	64	65	57	54	68	71	71	69	70	54	70	68	65	58	51	60	64	64	68	68	67	68	56	67	69	69	69	64	55	64	63.9
Farmers	Maximum	82	92	94	90	95	96	94	94	83	88	81	88	85	88	85	86	92	94	95	87	87	95	95	92	83	83	83	85	80	84	88	88.5
	Minimum	50	56	59	55	52	59	64	65	68	68	71	68	58	60	58	49	50	56	60	64	61	57	57	57	62	66	65	70	68	60	57	60.3
Maysville*	Maximum	94	92	91	90	93	98	94	93	83	91	76	84	89	90	86	90	94	95	97	97	89	90	96	89	70	86	89	88	76	84	86	89.0
	Minimum	53	51	61	58	55	60	69	64	68	70	71	63	60	62	57	54	55	58	64	68	66	59	59	71	67	65	61	64	63	56	60	61.8
Middlesboro	Maximum	83	83	83	83	83	85	86	86	80	83	82	81	80	78	83	83	84	87	90	90	88	87	89	84	84	81	77	82	80	75	83	83.3
	Minimum	53	56	63	61	59	61	63	65	67	69	70	66	67	68	65	55	59	56	58	63	65	65	60	63	66	69	69	68	70	61	61	63.3
Mount Sterling*	Maximum	88	89	89	88	92	88	86	90	79	87	80	89	87	87	85	87	90	92	90	95	89	84	91	90	82	83	83	84	74	81	82	86.5
	Minimum	57	65	66	61	58	65	69	69	71	69	71	68	62	61	60	55	56	61	68	66	68	66	64	73	68	68	67	70	70	68	62	65.2
Richmond *	Maximum	91	90	90	89	92	91	93	93	75	88	78	78	86	88	83	88	90	93	95	95	85	89	92	92	75	90	84	84	75	82	84	87.1
	Minimum	59	68	67	61	60	66	69	72	71	69	70	70	63	66	61	58	62	65	71	71	70	67	68	73	69	69	69	69	70	58	62	66.5
Weeksbury	Maximum	89	91	90	86	86	90	92	89	88	88	86	79	83	83	84	88	93	94	95	96	90	83	84	83	85	75	81	85	83	83	86	86.7
	Minimum	52	56	60	58	59	59	61	64	60	68	68	67	62	65	64	52	55	55	61	63	64	60	67	66	67	68	68	67	69	62	56	62.0
Williamsburg*	Maximum	87	90	88	89	88	90	81	88	87	88	88	88	85	87	87	89	92	95	98	95	90	93	95	92	90	89	80	88	82	78	90	88.9
	Minimum	52	61	59	61	58	60	62	65	61	67	68	66	68	66	66	64	52	57	60	63	63	65	64	60	68	70	69	67	70	68	65	63.4

*Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
No Rain
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Qu'Appelle
Swift Current
Minnedosa
Winnipeg
Port Arthur
Spokane
Seattle
Helena
Billings
Miles City
Williston
Devils Lake
Grand Fork
Bismarck
Moorhead
Duluth
Yellowstone Park
Sheridan
Pocatello
Lander
Winnemucca
Salt Lake City
Cheyenne
North Platte
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CLIMATOLOGICAL DATA

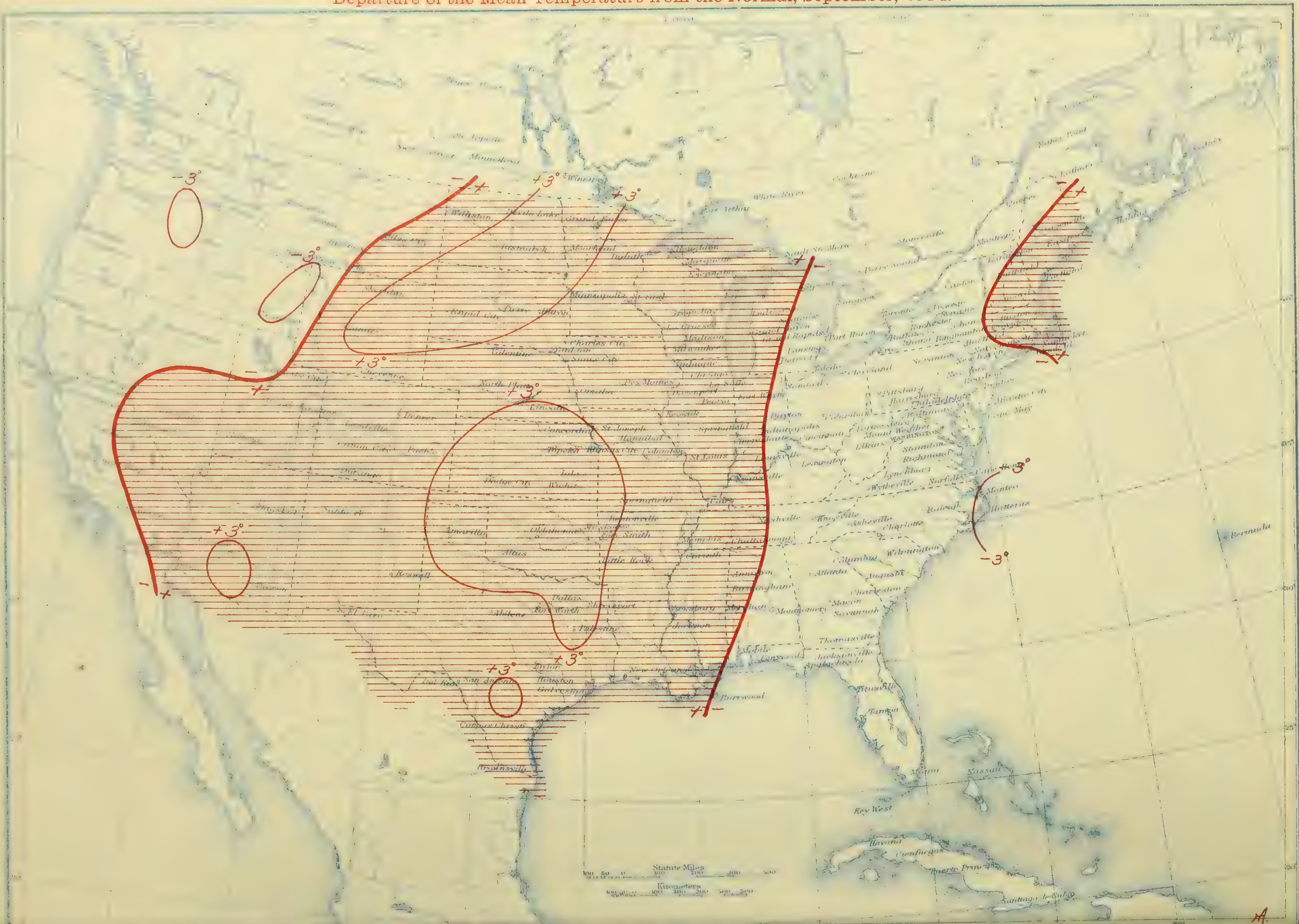
KENTUCKY SECTION

SEPTEMBER 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 20, 1914

Departure of the Mean Temperature from the Normal, September, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XIX. LOUISVILLE, KY., SEPTEMBER, 1914. No. 9

GENERAL SUMMARY.

Although the temperature during September averaged considerably below normal and the precipitation slightly above normal, there were many clear, warm days, and the weather was generally favorable for the growth, maturing and harvesting of the staple crops. Following the rains that began the second week in August, there was practically a second growing season, which compensated to a considerable extent for the losses sustained from the severe drought during June and July, and greatly relieved the situation caused by shortage of feed for stock. Tobacco showed marked improvement, in many places the quality being better than for several years. Late corn and late potatoes made good crops, and pastures continued in excellent condition. Gardens, which in many instances were replanted immediately after the August rains began, were yielding fresh vegetables at the end of the month. The soil was in good working condition throughout the month and preparation for seeding advanced rapidly.

PRESSURE.

High pressure areas of marked energy and extent controlled weather conditions over the State on all except a few days, being almost continuously dominant after the 12th, and as a result the weather was generally clear and nights were cool; also there was ample sunshine.

The mean sea-level pressure, computed from the records of two stations, was 30.14 inches. The highest was 30.42 inches at Louisville on the 28th, and the lowest 29.95 inches at Lexington on the 11th.

TEMPERATURE.

The mean for the State, computed from the records of 35 stations, was 67.8°, which is 2.8° below normal. The temperature has averaged lower than this in only three Septembers during the past 25 years. The first week was moderately warm, maximum temperatures ranging between 80° and 95°, but the second week was comparatively cool. The warmest days occurred during the period 18th-22d, when maximum temperatures of 90° and above were registered at most stations, the highest being 97° on the 21st at Beattyville. The month closed with a week of cool weather, but the minimum temperatures were not uncommonly low, being generally in the 40's, and the growth of vegetation was not appreciably checked. The lowest temperature for the State was 36° at Berea on the 26th and Farmers on the 27th.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 83 per cent and at 7 p. m. 61 per cent.

PRECIPITATION.

The average for the State, computed from the reports of [illegible] stations, was 2.96 inches, which is 0.26 inch in excess of the normal amount for September. The heaviest rainfall occurred over the headwaters of the Cumberland, the basin of the Salt River and the southwestern counties, where the total precipitation for the month ranged between 4 and 6 inches. Over the northeastern counties the monthly amounts ranged between 1 and 2 inches, while most of the central counties received from 3 to 4 inches. Rainfall was general and moderately heavy on the 7-8th, 11th and 23d-24th. The amounts at the various stations ranged between 1.03 inches at Farmers and 6.04 inches at Blandville.

WIND.

The total wind movement at Louisville was 6453 miles and at Lexington 5597 miles, the average hourly velocity being 9.0 and 7.8 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 32 miles per hour from the south on the 22d, and at Lexington 27 miles per hour from the northwest on the 6th.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 69 and at Lexington 70, which is somewhat more than the normal amount.

MISCELLANEOUS.

Thunderstorms occurred in the central and western counties on several days, but were more general on the 6th, 7th, 8th, 22d and 23d. On the 6th a barn was burned by lightning near Morganfield, and on the 8th a barn was destroyed and two cows killed by lightning near Bowling Green.

Light frost was reported from Alpha, Clinton county, on the 27th and 28th, but there was no damage.

There was a steady decrease in the amount of water in the streams of the State, including the Ohio, until at the end of the month record low stages had been reached at several points.

ERRATA.

August, 1914: Anchorage—mean temperature and departure should be 76.2, +1.4. St John, date of highest temperature should be August 6th.

Comparative data for September.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	72.1	+1.5	101	36	1.23	−1.47
1890	67.0	−3.6	95	36	2.71	+0.01
1891	69.5	−1.1	97	42	1.89	−0.81
1892	68.5	−2.1	93	38	2.68	−0.02
1893	69.6	−1.0	99	35	3.24	+0.54
1894	71.7	+1.1	98	37	2.71	+0.01
1895	73.4	+2.8	101	27	1.10	−1.60
1896	68.6	−2.0	100	30	3.77	+1.07
1897	72.8	+2.2	105	31	0.21	−2.49
1898	73.4	+2.8	103	42	4.36	+1.66
1899	68.7	−1.9	105	27	1.66	−1.04
1900	74.6	+4.0	102	35	2.25	−0.45
1901	68.1	−2.5	98	33	3.57	+0.87
1902	67.3	−3.3	97	29	4.01	+1.31
1903	69.1	−1.5	100	32	0.91	−1.79
1904	71.1	+0.5	99	34	2.58	−0.12
1905	70.2	−0.4	95	36	2.61	−0.09
1906	73.0	+2.4	95	45	6.15	+3.45
1907	69.1	−1.5	102	35	3.00	+0.30
1908	71.6	+1.0	101	30	1.03	−1.67
1909	67.7	−2.9	97	32	2.51	−0.19
1910	71.8	+1.2	99	38	4.41	+1.71
1911	74.3	+3.7	99	46	3.71	+1.01
1912	71.0	+0.4	103	33	2.80	+0.10
1913	69.6	−1.0	106	29	2.49	−0.21
1914	67.8	−2.8	97	36	2.96	+0.26

Climatological data for September, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	67.7	− 3.5	91	21	39	27	36	2.99	+ 0.38	1.20	0	7	22	3	5	E	W. T. Austin.
Blandville	Ballard	445	32	69.8	− 1.2	90	1	46	24	27	6.04	+ 3.06	2.53	0	7	11	14	5	NE	E. W. Horr.
Calhoun	McLean	393	11	70.6	− 2.2	93	21	41	27	36	2.72	+ 0.14	1.04	0	7	9	18	3	SE	W. A. Taylor.
Earlington	Hopkins	370	24	71.1	+ 0.6	95	1†	40	27	43	2.93	− 0.12	1.12	0	7	24	1	5	S	Brick Southworth.
Hopkinsville	Christian	524	18	67.6	− 4.1	90	21	42	27†	36	5.25	+ 2.21	1.55	0	7	14	4	12	E	W. F. Randle.
Owensboro	Daviess	479	17	68.8	− 1.8	90	20†	41	27	32	2.04	− 0.77	0.88	0	6	17	5	8	S	Henry S. Berry.
Paducah	McCracken	341	25	.....	.....	.....	.....	.....	.....	.....	4.04	+ 1.05	2.30	0	6	.....	.....	.....	.....	S. A. Fowler.
Central Section.																				
Alpha	Clinton	.....	20	67.8	− 2.9	87	21	42	27	29	3.37	+ 0.21	1.20	0	5	14	8	8	W	W. W. Hicks.
Anchorage	Jefferson	700	13	67.0b	− 1.9	92	20†	39	26	36	1.95	− 0.82	1.09	0	5	26	1	3	NE	C. E. Barret.
Bardstown	Nelson	637	17	70.7	− 1.1	96	20†	40	27	36	3.87	+ 1.18	1.81	0	6	17	7	6	N	Chas. M. Talbott.
Bowling Green	Warren	500	25	68.7	− 3.3	93	21	40	27	39	4.43	+ 1.37	1.40	0	7	23	4	3	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	.....	.....	.....	.....	.....	.....	.....	4.05	− 0.79	1.38	0	8	.....	.....	.....	.....	K. W. Massey.
Cloverport	Breckenridge	.....	0	.....	.....	.....	.....	.....	.....	.....	3.08	.....	1.26	0	7	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Lee Ray.
Eubank	Pulaski	1177	20	67.4	− 1.5	90	20†	42	27	33	3.77	+ 0.25	1.56	0	4	15	10	5	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	65.0	− 3.6	85	2	42	26†	26	1.86	− 0.98	0.93	0	3	17	6	7	S	Geo. L. Barnes
Franklin	Simpson	691	20	70.8	− 1.2	95	21	45	27	31	2.74	− 0.62	1.00	0	6	4	24	2	NW	J. E. Newman.
Greensburg	Green	581	22	68.2	− 1.8	94	21	38	27	38	3.21	+ 0.24	1.32	0	6	9	3	18	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	.....	.....	.....	.....	.....	.....	.....	1.90	− 1.21	0.90	0	6	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	.....	16	67.3	− 3.6	88	1†	43	26	29	3.48	− 0.65	1.50	0	6	22	3	5	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	68.1	− 1.5	89	21†	42	27	29	3.80	+ 0.17	1.98	0	5	22	5	3	NE	John E. Stone.
Lexington	Fayette	989	26	66.8	− 1.1	90	21	46	26	25	1.82	− 0.60	1.12	0	6	16	10	4	NE	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	67.0	− 3.6	89	1†	37	27	36	4.50	+ 1.82	1.40	0	9	20	2	8	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	42	69.0	− 0.9	90	21	48	27	28	1.35	− 1.28	0.95	0	6	15	6	9	NE	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	.....	4	67.2	.....	88	1	43	27	31	2.09	.....	1.00	0	6	19	5	6	S	Wm. I. Hunt.
St. John	Hardin	777	18	66.6	− 2.3	90	21	40	27	32	4.65	+ 1.56	2.00	0	7	22	4	4	.....	Sisters of Loretto.
Scott	Kenton	.....	16	67.2	− 2.8	94	21	41	26	32	1.85	− 0.63	1.20	0	4	18	7	5	S	E. B. Wilson.
Shelby City	Boyle	1087	20	67.6	− 2.0	95	21	38	27	36	3.47	+ 0.45	1.05	0	4	22	6	2	NE	H. F. Ewing.
Shelbyville	Shelby	759	25	65.7a	− 3.8	90	20†	40	26†	32	2.00	− 0.89	1.20	0	4	19a	4a	6a	E	C. R. Burnett.
Taylorsville	Spencer	489	12	65.8	− 2.9	89	1†	38	27	34	2.21	− 1.19	1.02	0	5	17	6	7	SE	E. D. Bourne.
Williamstown	Grant	943	11	66.2	− 2.8	92	21	43	10	34	2.47	− 0.52	1.91	0	3	13	9	8	.....	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	67.6	− 2.4	97	21	40	27	40	3.70	+ 0.92	1.30	0	8	12	12	6	NE	G. W. Cann.
Berea	Madison	1070	13	67.9	− 1.3	96	19†	36	26	41	2.52	− 0.20	1.02	0	4	23	5	2	NE	C. F. Rumold.
Catlettsburg	Boyd	534	25	.....	.....	.....	.....	.....	.....	.....	1.92	− 0.55	0.60	0	7	.....	.....	.....	.....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	.....	.....	.....	.....	.....	.....	.....	1.85	− 0.12	1.57	0	3	17	7	6	S	J. V. Oldham.
Farmers	Rowan	668	8	66.2	− 2.3	95	20	36	27	43	1.03	− 2.06	0.88	0	2	.....	.....	.....	.....	Lee Craycrait.
Hazard	Perry	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Kelly E. Watts.
Jackson	Breathitt	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
London	Laurel	.....	0	.....	.....	.....	.....	.....	.....	.....	4.12	.....	1.49	0	7	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	.....	2	.....	.....	.....	.....	.....	.....	.....	3.12	.....	0.92	0	6	.....	.....	.....	.....	Lucien S. Johnson.
Manchester	Clay	.....	3	.....	.....	.....	.....	.....	.....	.....	2.89	.....	1.41	0	4	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	66.9	− 3.3	95	20	40	10†	39	1.41	− 1.28	0.99	0	4	23	5	2	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	67.2	− 1.6	88	2	41	26	32	1.76	− 0.99	1.14	0	3	26	2	2	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	24	65.8	− 1.8	89	1	40	27	30	1.68	− 1.21	0.80	0	6	23	3	4	W	H. Clay McKee.
Pikeville	Pike	.....	6	.....	.....	.....	.....	.....	.....	.....	2.42	.....	0.80	0	8	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	22	69.2	− 1.4	93	20	44	26†	33	4.28	+ 1.64	2.27	0	6	16	9	5	E	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	67.1	.....	92	22	39	27	34	3.05	.....	0.85	0	6	19	1	10	N	O. A. Lund.
Williamsburg	Whitley	939	18	68.2	− 2.1	92	2	42	26	35	3.48	+ 0.12	1.23	0	8	17	6	7	E	N. C. Jones.
State averages and extremes		.....	.....	67.8	.....	97	21	36	26†	43	2.96	.....	2.53	0	6	18	6	6	NE	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for September, 1914.

STATIONS.		Day of month																															[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam ‖	G	.52						.08	1.20	.22		.08								T.				[illegible]	.86								[illegible]
Blandville ‖	M		.03			T	1.87		.41		.05					.12							[illegible]	1.03									[illegible]
Calhoun	G		.01				.58	.10	1.01			.35											T.	.61	.03								2.72
Earlington ‖	G							.76	1.12	.11		.03									.05			.33	.53								[illegible]
Hopkinsville ‖	C	.45						.40	1.55	.90		.05												1.00	.90								[illegible]
Owensboro ‖	O	.04						.20	.88			.28							T.				T.	.20	.44								[illegible]
Paducah ‖	O		.08					1.10	.15	T.												.06		2.30	.35								[illegible]
Central Section.																																	
Alpha	C		.52				T.	.55	T.		.95	.15						T.						1.20	T.								[illegible]
Anchorage	O						.10		.27			.17												1.09	.32								[illegible]
Bardstown ‖	S	.14						.36	.64	.30		.62													1.81								[illegible]
Bowling Green ‖	G	.65						.15	1.32	.15		.10							T.					.66	1.40								[illegible]
Burnside ‖	C			1.08				T.	.27	.02		1.38	.10						.02				.12		1.06	T.							4.05
Cloverport ‖	O	.57						.04	1.26	.01		.30												.33	.57								3.08
Edmonton	G																																
Eubank ‖	C								1.56			1.13	.04												1.04								3.77
Frankfort ‖	K	T.						.38	T.	T		.55	T.					T.							.93								1.86
Franklin	G							.10	.40			.24						T.					1.00	.82	.18								2.74
Greensburg ‖	G	.15						.14	1.32	.08		.49													1.03								3.21
High Bridge ‖	K							.08	.12	.05		.90	.05												.70								1.90
Irvington	O						.05	1.50	.70			.29												.79	.15								3.48
Leitchfield	G					T.		.60	.27		.60												.35	1.98									3.80
Lexington ***	K						.03	.03	.13		T.	.51												.89	.23								1.82
Loretto	S	.01					.11	.64	1.40	T.		.72	.01											1.33	.25	.03							4.50
Louisville***	O						.14	.07	.03		.07	.09											T.	.95	T.								1.35
Do. (Cherokee Park)	O						.06	.35	.11			.27												1.00	.30								2.09
St. John‖	S	.47						.10	2.00	.05		.60												.07	1.36								4.65
Scott	L						.11	T.	T.			.25											T.	1.20	.29								1.85
Shelby City	K							1.04	.71			1.05												T.	.67								3.47
Shelbyville ‖	S	.06						.24	T.			.50						T.							1.20								2.00
Taylorsville	S						T.	.30	.22			.54						T.						1.02	.13								2.21
Williamstown ‖	L							.40				.16													1.91								2.47
Eastern Section.																																	
Beattyville ‡	K			.30				.60	.06			1.00	.08						.02				.34	T.	1.30								3.70
Berea	K		.08					.56				1.02						T.							.86								2.52
Catlettsburg ‖	B			.30					.08			.52	.24											.08	.60	.10							1.92
Falmouth ‖	L							.08				.20													1.57								1.85
Farmers	L											.88													.15								1.03
Hazard ‖	K																																
Jackson ‖	K																																
London ‖	C			.38					.55			1.20	.20						.05						1.49	.25							4.12
Louisa ‖	B			.85					.66			.92	.15												.45	.09							3.12
Manchester ‖	K							.27				1.41												.03	1.18								2.89
Maysville ‖	O							.04				.35	.03												.79								1.41
Middlesboro	C								.02			1.14													.60								1.76
Mount Sterling ‖	L							.30	.05	.04		.45	.04											T.	.80								1.68
Pikeville ‖	B			.32				.04	.54			.80	.12											.04	.24	.32							2.42
Richmond ‖	K	T.		T.				2.27	.15	.02		1.00	.02						T.						.82								4.28
Weeksbury	B			.40			.30	.50	.85														.30		.70								3.05
Williamsburg ‖	C			1.23				.10	.07	.08		.80	.14						T.						.96	.10							3.48

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

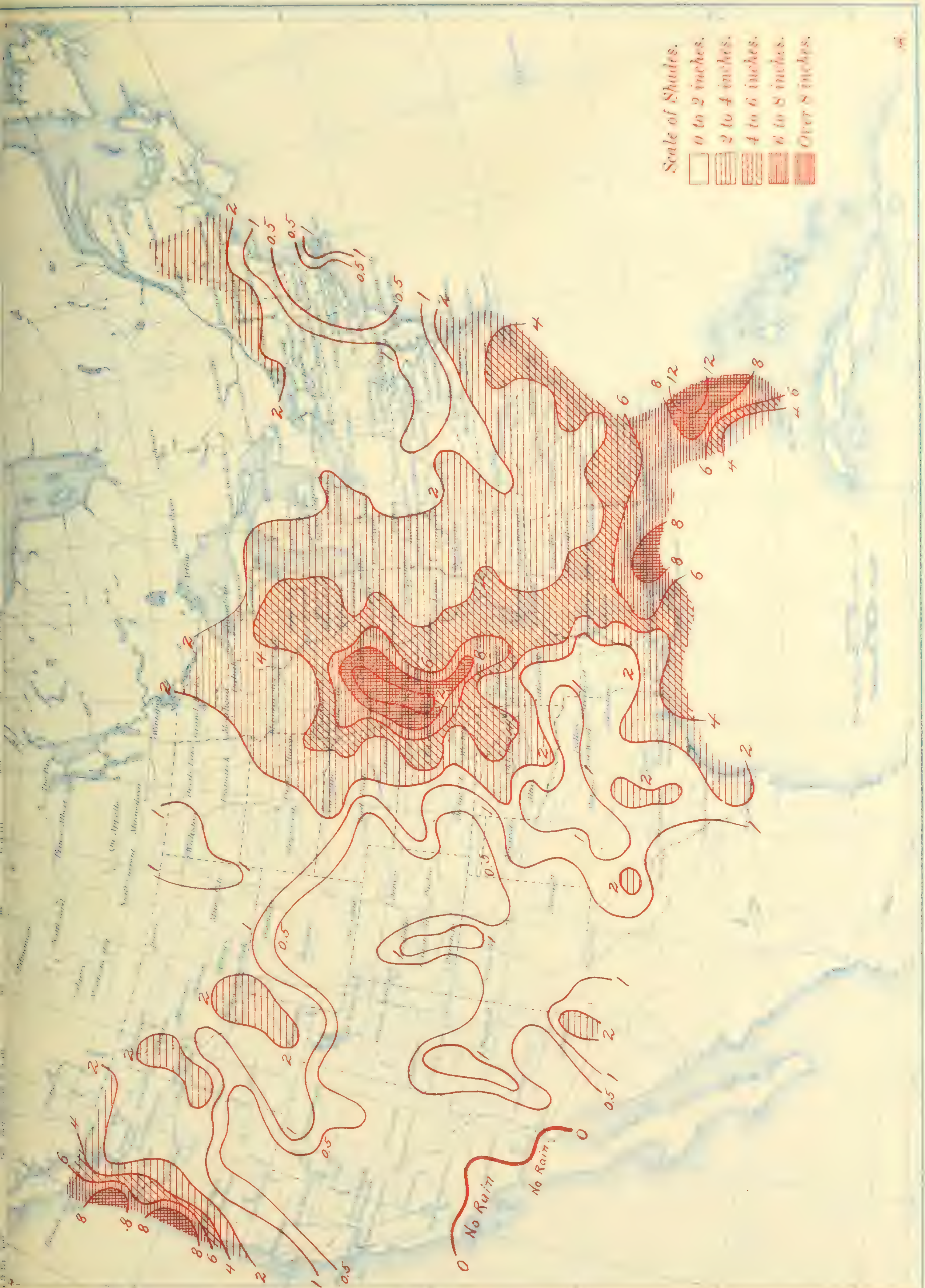
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for September, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	90	84	80	80	84	89	88	76	72	77	73	73	81	81	81	83	85	87	89	90	91	86	61	74	69	69	75	78	81	81	..	80.3
	Minimum	73	73	59	55	52	55	67	66	57	49	52	53	50	51	61	51	50	53	63	63	64	64	60	47	47	41	39	43	46	49	..	55.1
Blandville	Maximum	90	80	79	84	79	90	83	81	74	75	79	73	81	81	74	81	84	84	84	86	87	81	66	73	70	68	71	74	76	75	..	78.8
	Minimum	72	68	59	62	63	63	64	69	60	56	69	56	61	68	65	62	57	69	67	69	69	66	55	46	50	50	48	50	52	57	..	60.7
Calhoun	Maximum	92	88	83	85	84	89	89	79	74	79	78	75	82	81	81	88	85	90	91	91	93	88	75	79	75	74	74	82	85	85	..	83.1
	Minimum	73	70	56	58	54	67	65	65	57	50	64	55	51	65	64	55	56	67	66	65	65	70	56	46	49	46	41	47	49	51	..	58.1
Earlington *	Maximum	95	87	83	85	87	93	92	80	79	81	79	80	85	86	84	91	89	94	95	95	95	92	58	79	76	78	83	86	86	87	..	85.3
	Minimum	69	72	67	57	55	57	66	66	57	50	52	52	53	59	66	62	56	68	65	62	65	65	57	45	45	42	40	45	44	47	..	56.9
Hopkinsville	Maximum	89	83	78	80	83	88	85	79	74	77	76	72	78	81	79	82	83	87	88	87	90	85	58	74	71	71	75	78	78	79	..	79.6
	Minimum	67	70	61	53	53	55	64	67	59	51	53	55	55	59	61	52	52	57	66	64	63	64	58	46	46	43	42	42	45	48	..	55.7
Owensboro *	Maximum	88	83	83	77	79	85	85	85	71	74	72	71	79	79	79	83	84	87	89	90	90	85	56	72	70	70	73	77	79	81	..	79.2
	Minimum	69	70	56	56	55	60	65	66	57	53	60	55	53	62	64	56	57	69	67	66	67	69	56	46	52	49	41	53	52	52	..	58.4
Central Section																																	
Alpha	Maximum	86	86	76	78	76	84	83	75	70	74	70	71	75	76	76	76	78	84	84	86	87	83	77	63	66	65	71	71	74	76	..	76.6
	Minimum	76	76	66	56	53	69	67	68	59	47	65	55	63	61	56	50	60	62	63	64	66	67	63	55	50	44	42	45	48	52	..	58.9
Anchorage	Maximum	90	83	78	78	81	83	86	70	70	73	73	70	80	..	..	83	85	89	91	92	92	88	71	72	70	70	75	79	83	83	..	79.9
	Minimum	71	68	54	51	54	65	66	60	52	44	53	46	54	..	...	51	55	65	59	61	60	65	54	48	44	39	40	45	48	47	..	b54.2
Bardstown *	Maximum	93	92	83	84	85	86	87	69	75	79	79	81	84	85	86	88	89	93	95	96	96	93	70	77	75	74	79	83	82	87	..	84.2
	Minimum	70	74	61	57	53	62	65	64	54	47	56	51	51	60	59	52	57	65	63	64	68	68	64	53	48	45	40	45	50	50	..	57.2
Bowling Green*	Maximum	92	69	82	84	88	92	81	79	75	73	76	80	83	84	85	86	87	90	92	92	93	90	67	74	72	74	79	81	82	83	..	82.2
	Minimum	64	69	60	54	52	55	64	64	55	46	48	52	49	59	57	52	53	63	63	63	64	64	64	49	49	43	40	44	48	49	..	55.2
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank*	Maximum	88	88	79	79	80	80	86	80	74	78	71	71	81	81	78	80	80	87	87	90	90	86	81	70	68	67	75	76	80	81	..	79.7
	Minimum	65	69	62	50	47	62	61	64	53	45	48	52	51	54	52	45	45	62	61	61	63	65	60	51	46	44	42	56	54	64	..	55.1
Frankfort	Maximum	80	85	83	74	77	76	79	80	67	70	63	64	72	71	71	75	77	80	80	83	80	83	81	62	61	60	64	68	68	73	..	73.6
	Minimum	65	71	64	59	51	65	67	61	54	52	49	52	52	59	58	49	56	67	62	63	64	65	57	53	51	42	42	45	47	49	..	56.4
Franklin	Maximum	91	90	80	82	85	91	89	78	74	79	77	74	81	81	83	83	85	88	89	93	95	89	69	69	70	70	75	80	82	79	..	81.7
	Minimum	72	73	64	59	56	68	66	69	60	50	62	55	53	63	62	56	59	67	69	66	70	67	56	51	53	46	45	49	53	55	..	59.8
Greensburg*	Maximum	91	91	83	82	84	81	90	79	72	77	69	73	81	80	79	83	85	90	90	90	94	90	74	70	69	69	76	79	81	83	..	81.2
	Minimum	67	71	62	54	51	60	64	64	55	44	53	51	49	58	56	48	55	60	62	62	63	64	63	51	49	40	38	42	46	50	..	55.1
Irvington	Maximum	88	83	75	78	80	83	83	75	68	73	67	70	79	79	79	80	82	84	86	86	88	83	75	70	68	65	70	75	77	78	..	77.6
	Minimum	59	72	58	58	53	67	65	62	56	46	46	50	50	65	63	56	55	64	65	65	66	69	56	50	50	43	48	50	52	50	..	57.0
Leitchfield	Maximum	88	82	77	78	80	86	85	78	70	75	70	70	80	79	79	80	83	86	87	88	89	89	67	70	68	67	71	76	77	79	..	78.5
	Minimum	70	71	59	56	53	65	65	65	56	48	62	53	51	63	61	59	57	67	63	64	64	67	55	51	51	46	42	47	49	52	..	57.7
Lexington	Maximum	88	85	76	72	77	79	78	67	66	70	66	66	76	78	79	79	79	85	86	90	90	86	73	68	64	64	70	74	78	77	..	76.2
	Minimum	69	67	61	58	54	62	65	58	51	46	54	52	52	58	57	54	60	66	65	67	68	67	52	51	48	46	52	53	54	55	..	57.4
Loretto	Maximum	89	87	78	79	80	80	86	74	71	74	68	71	78	78	79	82	85	86	88	88	89	87	79	67	68	69	73	78	80	80	..	79.0
	Minimum	70	71	60	55	48	65	64	63	53	44	58	51	46	58	58	46	54	65	60	61	64	67	58	56	46	41	37	42	44	47	..	55.1
Louisville	Maximum	89	84	78	77	78	81	82	70	69	73	66	70	80	79	80	83	85	88	88	89	90	85	70	72	68	69	74	79	79	81	..	78.5
	Minimum	72	66	61	62	58	68	66	61	55	50	58	51	52	64	64	59	58	68	66	68	70	70	54	52	51	48	48	52	56	56	..	59.5
Do. (Cherokee Park)	Maximum	88	83	76	75	78	80	81	75	68	70	66	68	78	78	79	79	85	84	86	87	87	85	80	70	67	66	71	75	76	78	..	77.3
	Minimum	71	72	58	58	56	65	66	61	54	45	58	49	49	64	60	53	54	65	63	65	66	68	55	51	48	44	43	48	51	51	..	57.0
St John *	Maximum	89	86	79	78	81	83	84	69	69	73	67	69	80	78	79	80	83	77	89	89	90	87	60	74	68	67	72	76	81	80	..	77.9
	Minimum	67	70	58	59	53	61	64	64	54	43	53	51	50	54	59	52	51	59	62	62	64	66	60	50	48	42	40	48	50	49	..	55.4
Scott	Maximum	88	84	79	73	76	80	81	73	67	70	69	63	75	78	81	82	82	88	90	93	94	88	80	72	65	67	75	77	80	80	..	78.3
	Minimum	72	73	56	57	48	65	67	57	47	46	55	49	51	58	57	57	57	65	61	63	65	69	53	51	48	41	43	48	50	53	..	56.1
Shelby City	Maximum	92	88	81	81	83	83	83	73	68	73	66	70	82	83	79	79	79	90	90	93	95	89	81	71	68	68	74	75	78	81	..	79.9
	Minimum	68	72	62	56	49	54	65	63	52	43	59	51	49	56	53	48	57	65	62	61	66	67	59	52	50	42	38	44	45	50	..	55.3
Shelbyville *	Maximum	87	82	75	75	77	78	78	..	71	72	68	70	77	79	80	80	82	85	88	90	90	85	61	70	65	71	71	75	79	76	..	a77.0
	Minimum	66	70	58	55	53	55	55	60	..	44	51	48	49	55	58	51	53	63	63	64	64	66	61	51	45	40	40	43	47	49	..	a54.4
Taylorsville	Maximum	89	85	78	75	80	81	79	74	68	71	66	67	77	78	78	80	82	85	86	87	89	87	80	70	66	65	71	76	77	78	..	77.5
	Minimum	69	69	60	50	49	65	65	62	53	45	57	51	48	57	56	46	53	64	59	60	62	64	56	52	46	40	38	43	43	45	..	54.2
Williamstown *	Maximum	87	86	78	76	77	79	82	67	70	70	73	67	77	78	81	83	85	88	89	90	92	88	67	72	69	70	76	76	80	84	..	78.6
	Minimum	61	61	46	48	52	55	64	55	47	43	46	47	47	54	55	53	51	60	64	60	69	69	64	51	45	44	47	49	50	54	..	53.7
Eastern Section.																																	
Beattyville *	Maximum	95	94	85	83	85	88	88	67	75	79	69	70	78	80	80	81	80	88	92	96	97	90	86	69	73	72	80	80	81	86	..	82.2
	Minimum	61	66	64	52	53	57	59	60	53	41	44	51	48	50	50	46	52	61	59	60	60	62	61	53	49	41	40	43	44	46	..	52.9
Berea	Maximum	84	89	81	78	80	84	85	69	75	68	68	69	82	83	82	84	79	93	96	95	87	80	74	70	70	74	83	82	86	81	..	80.9
	Minimum	65	74	65	55	49	59	65	53	43	54	58	50	53	59	56	46	58	65	62	60	64	69	59	51	45	36	39	42	44	48	..	54.9
Farmers	Maximum	90	92	84	77	80	86	78	69	71	74	68	71	77	80	82	80	81	88	92	95	92	90	83	67	72	69	75	72	81	84	..	80.0
	Minimum	65	62	64	43	46	50	63	59	50	40	51	52	51	52	47	62	52	63	57	58	58	60	58	52	45	57	36	40	40	41	..	52.5
Maysville*	Maximum	92	90	82	75	80	85	87	68	73	75	74	71	79	84	84	86	85	91	93	95	93	92	74	74	69	70	77	79	84	84	..	81.5
	Minimum	65	71	62	55	49	50	67	57	46	40	42	50	50	52	47	48	50	53	60	60	60	60	64	50	45	40	40	46	46	45	..	52.3
Middlesboro	Maximum	85	88	82	79	80	81	87	80	75	75	72	73	77	77	78	77	77	84	85	87	86	85	82	72	70	68	73	76	74	78	..	78.8
	Minimum	62	65	74	53	53	55	61	64	60	45	59	54	54	54	50	45	55	62	61	61	64	63	61	55	51	41	44	46	49	50	..	55.7
Mount Sterling*	Maximum	89	82	81	79	76	82	80	70	68	71	68	68	76	77	79	78	70	83	87	87	87	87	80	68	66	65	70	72	76	77	..	76.6
	Minimum	62	61	65	63	51	58	58	61	52	45	51	53	53	56	53	50	50	65	61	62	64	67	67	52	49	43	40	45	46	47	..	55.0
Richmond *	Maximum	91	90	81	80	81	82	83	62	73	76	68	72	82	83	82	84	84	89	90	93	92	89	79	70	72	71	75	80	82	83	..	80.6
	Minimum	68	71	65	58	53	64	65	62	52	45	61	54	51	57	55	53	57	65	65	65	68	69	66	53	50	44	44	47	52	52	..	57.8
Weeksbury	Maximum	91	91	81	79	89	90	86	78	75	74	68	69	77	81	79	78	76	85	87	91	91	92	86	76	66	66	72	72	76	78	..	80.1
	Minimum	63	67	68	53	57	60	55	50	52	43	55	55	54	54	49	44	59	59	58	59	68	62	62	54	50	43	39	43	43	45	..	54.1
Williamsburg*	Maximum	91	92	81	80	88	87	87	82	79	78	70	79	80	80	80	80	79	85	86	89	86	87	85	65	70	69	74	70	77	80	..	80.5
	Minimum	65	59	66	53	53	58	57	65	58	54	49	56	56	54	51	52	53	60	62	61	65	67	60	64	52	42	45	43	47	51	..	55.9

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain

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CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

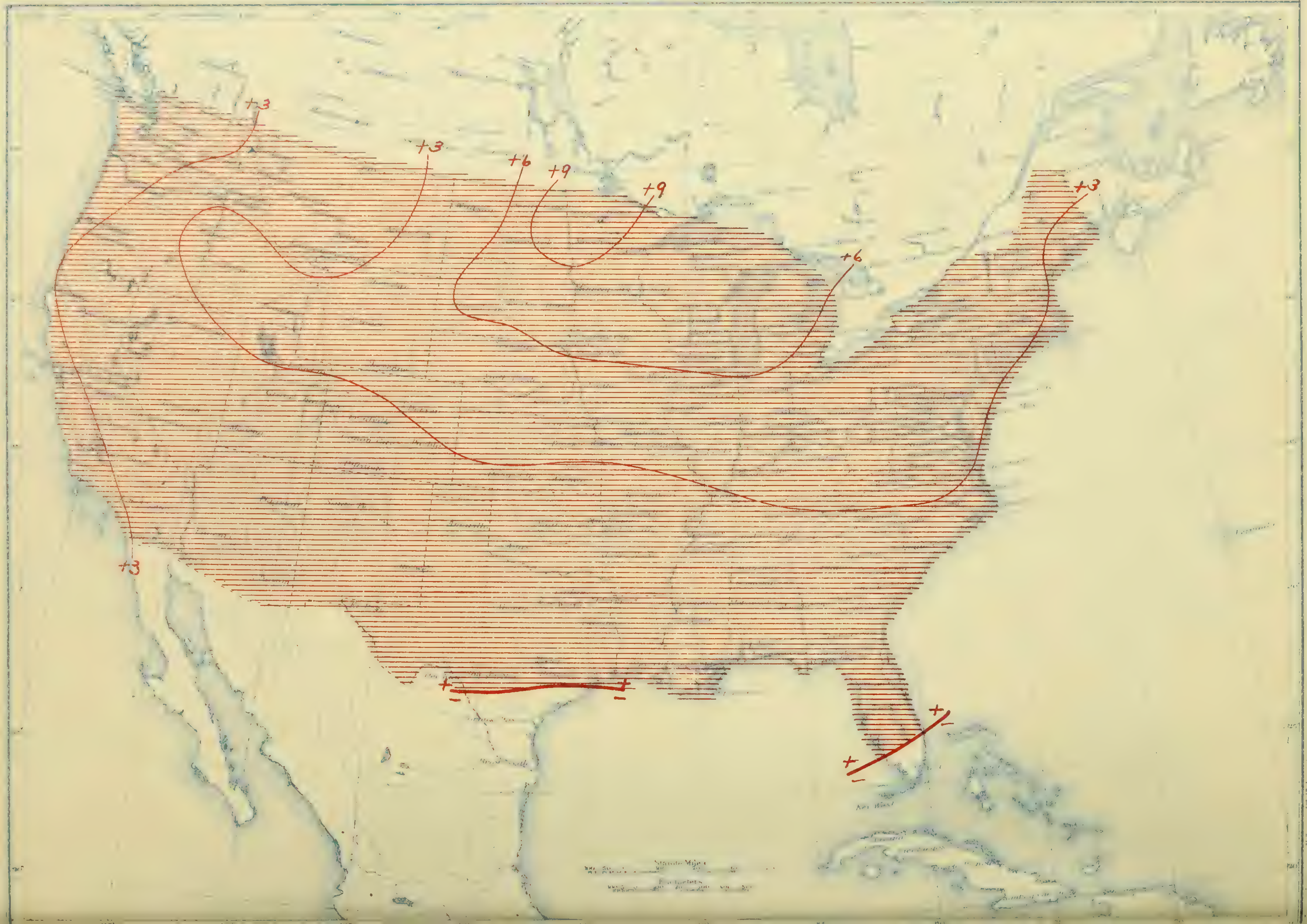
KENTUCKY SECTION

OCTOBER 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 20, 1914

Departure of the Mean Temperature from the Normal, October, 1914



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XIX. LOUISVILLE, KY., OCTOBER, 1914. No. 10

GENERAL SUMMARY.

Except in the south-central counties, where the monthly rainfall was excessive, weather conditions during October were in the main favorable for farm work and the growth of vegetation. The unusual warmth and abundant moisture caused rapid germination and development of fall grains, and kept pastures in excellent condition. The wet spell of the 8-17th was followed by nearly two weeks of ideal autumn weather. Harvesting of late crops and fall seeding progressed rapidly, and in the western part of the State a larger acreage than usual was sown to grain. During the first three weeks late planted gardens continued to produce fresh vegetables in considerable quantities. Killing frost was general over the State on the 27th and ended the growing season, but occurred too late to cause much damage. This was the first frost of the season.

PRESSURE.

Two low pressure areas of importance affected weather conditions over the State during the month. One of these moved northeastward over Oklahoma and Missouri on the 9th and 10th; the other appeared on the east Gulf coast on the 14th and pursued an eccentric course northward and westward, passing over Kentucky on the 15th and 16th. Both storms were attended by heavy precipitation in this State. High pressure areas were dominant during most of the month.

The mean sea-level pressure, computed from the records of two stations, was 30.08 inches. The highest was 30.38 inches at Louisville on the 27th, and the lowest 29.72 inches at both Louisville and Lexington on the 17th.

TEMPERATURE.

The mean temperature for the State, computed from the records of 35 stations, was 59.7°, which is 2.0° above normal. The first decade, and also the period 19-24th, were unusually warm. On the 6th and 7th maximum temperatures of 80° to 90° were registered generally over the State, the highest for the month being 91° at Farmers on the 6th. Decidedly cold weather set in on the 26th, and continued through the rest of the month. During the last five days temperatures of freezing and below were registered generally over the State, the lowest being 22° on the 28th at Eubank, Farmers and Middlesboro.

HUMIDITY.

At Louisville the average relative humidity—89 per cent at 7 a. m. and 72 per cent at 7 p. m.—was the highest on record for October during the past 25 years.

PRECIPITATION.

The average precipitation for the State, computed from the reports of 46 stations, was 5.10 inches, which is 2.82 inches in excess of the normal amount for October. Nearly all of the rainfall occurred during the periods 8-10th and 13-17th, being heaviest on the 9th, 10th, 14th and 15th. Over the counties immediately bordering on the Ohio River west of the mouth of the Licking, and also over the extreme eastern counties, the monthly amounts were generally between 2 and 4 inches. Over the east-central and south-central counties the amounts ranged between 6 and 8 inches, while the rest of the State received from 4 to 6 inches. Amounts at the various stations ranged between 2.13 inches at Weeksbury, Floyd County, and 8.49 inches at Franklin, Simpson County. Some of the heavy 24-hour rainfalls were: 3.95 inches at Hopkinsville and 3.24 inches at Franklin on the 9th, and 3.45 inches at Bowling Green on the 10th.

WIND.

The total wind movement at Louisville was 6592 miles and at Lexington 5738 miles, the average velocity being 8.9 and 7.7 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 44 miles per hour from the west on the 10th, and at Lexington 31 miles per hour from the northwest on the 26th.

SUNSHINE AND CLOUDINESS.

The percentage of sunshine for the month at Louisville was 54 and at Lexington 41, which is considerably below the average for October at both stations.

MISCELLANEOUS.

Thunderstorms occurred at most stations on the 8th and 9th; also in the central counties on the 10th, and at a few stations on the 14th and 16th.

October 8.—Two school children were killed by lightning and several others severely shocked near Monticello.

October 10.—Lightning and wind caused much damage over the State. Near Slaughtersville lightning destroyed a stable with the loss of several head of stock and other property. At Scottsville a residence was damaged by lightning and the owner severely shocked. In the vicinity of Pikeville lightning struck the telephone wires, disarranging the system over a large area and shocking two persons who were using the telephone at the time. Windstorms caused considerable damage at Carlisle and Lexington. During a windstorm at Louisville, a young woman was struck by a branch blown from a tree and seriously injured.

In the south-central counties, late corn was injured to some extent and wheat sowing delayed by the excessive rains near the middle of the month.

There was a sharp rise in the smaller streams of the State, including the Cumberland, on the 16th, and a moderate swell in the Ohio below Cincinnati between the 16th and 22d; otherwise stages were low during the month. The lowest water ever known at Cloverport occurred from the 5th to 8th when a stage of 1.0 foot was reached.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25 year normal.
1889	52.0	−5.7	89	23	2.42	+0.14
1890	55.7	−2.0	87	23	2.94	+0.66
1891	54.8	−2.9	92	21	0.78	−1.50
1892	57.3	−0.4	97	19	0.51	−1.77
1893	56.4	−1.3	90	19	4.00	+1.72
1894	58.6	+0.9	92	25	1.36	−0.92
1895	52.2	−5.5	89	14	1.24	−1.04
1896	55.8	−1.9	90	25	1.71	−0.57
1897	63.2	+5.5	96	26	1.10	−1.18
1898	57.1	−0.6	93	21	4.19	+1.91
1899	61.3	+3.6	93	26	2.42	+0.14
1900	64.5	+6.8	94	29	2.29	+0.01
1901	58.1	+0.4	93	25	1.57	−0.71
1902	60.1	+2.4	91	25	2.34	+0.06
1903	57.7	.0	96	19	2.22	−0.06
1904	57.2	−0.5	93	20	0.52	−1.76
1905	57.0	−0.7	90	25	4.95	+2.67
1906	56.9	−0.8	91	20	1.51	−0.77
1907	55.5	−2.2	93	20	2.97	+0.69
1908	57.1	−0.6	92	20	0.71	−1.57
1909	55.2	−2.5	94	18	2.11	−0.17
1910	61.4	+3.7	96	17	4.45	+2.17
1911	59.9	+2.2	94	27	3.71	+1.43
1912	59.5	+1.8	92	25	1.42	−0.86
1913	56.9	−0.8	97	23	3.55	+1.27
1914	59.7	+2.0	91	22	5.10	+2.82

Climatological data for October, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	60.6	+ 3.1	86	6†	28	28	31	5.06	+2.91	2.75	0	6	12	8	11	S	W. T. Austin.
Blandville	Ballard	445	32	60.6	+ 2.5	79	1†	30	27	26	4.03	+1.30	2.67	0	7	12	8	11	SW	E. W. Horr.
Calhoun	McLean	393	11	61.5	+ 1.9	89	6	27	28	36	4.65	+1.43	1.90	0	9	6	20	5	N	W. A. Taylor.
Earlington	Hopkins	370	24	61.0	+ 2.0	90	6	26	28	39	4.47	+2.23	2.35	0	7	12	8	11	S	Brick Southworth.
Hopkinsville	Christian	524	18	60.4	+ 0.4	84	6	25	28	35	7.02	+4.29	3.95	0	8	13	6	12	N	W. F. Randle.
Owensboro	Daviess	479	17	60.6	+ 1.8	85	7	29	27†	30	3.77	+0.54	1.65	0	6	11	7	13	S	Henry S. Berry.
Paducah	McCracken	341	25	...	...	...	...	...	...	...	3.56	+1.14	1.85	0	4	...	...	...	...	S. A. Fowler.
Central Section.																				
Alpha	Clinton	...	20	59.8	+ 0.3	80	7	27	28	33	7.77	+5.34	2.55	0	8	11	6	14	W	W. W. Hicks.
Anchorage	Jefferson	700	13	59.3	+ 3.4	87	6	25	27	33	4.79	+2.18	1.86	0	9	11	9	11	SW	C. E. Barret.
Bardstown	Nelson	637	17	61.7	+ 2.5	89	6†	27	28	37	6.39	+4.58	1.95	0	8	11	12	8	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	59.6	+ 0.7	88	6	25	28	35	7.39	+5.50	3.45	0	8	18	5	8	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	...	...	...	...	...	...	...	6.43	+4.13	2.30	0	12	...	...	...	...	K. W. Massey.
Cloverport	Breckenridge	...	0	...	...	...	...	...	...	...	2.95	...	1.00	0	9	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Miss Lee Ray.
Eubank	Pulaski	1177	20	a58.8	+ 2.1	85	6†	22	28	a39	6.87	+4.73	2.25	0	7	a9	a7	a14	E	Mrs. Katie Payne.
Frankfort	Franklin	560	23	56.8	+ 0.3	78	7	28	27†	24	3.71	+1.76	1.29	0	9	6	13	12	S	Geo. L. Barnes
Franklin	Simpson	691	20	62.0	+ 2.7	88	7	30	28	32	8.49	+6.39	3.24	0	8	8	16	7	NW	J. E. Newman.
Greensburg	Green	581	22	b58.7	+ 2.2	88	7	24	28	41	7.23	+4.91	2.00	0	12	19	10	2	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	...	...	...	...	...	...	...	4.98	+2.89	1.50	0	12	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	...	16	60.3	+ 5.8	83	7	29	28	28	3.98	+1.30	1.65	0	7	17	5	9	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	59.2	+ 1.4	84	7	26	28	34	5.51	+3.08	2.54	0	7	11	12	8	NW	John E. Stone.
Lexington	Fayette	989	26	58.9	+ 2.4	84	7	26	27	25	5.32	+3.10	1.77	0	11	9	9	13	NE	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	59.3	+ 0.7	84	6†	26	28	33	6.75	+4.64	1.95	0	16	16	3	12	...	Loretto Academy.
LOUISVILLE	Jefferson	525	42	60.7	+ 2.3	84	6	30	27	26	2.42	−0.21	0.77	0	10	8	8	15	N	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	...	4	59.8	...	82	6	29	27	30	3.14	...	1.32	0	8	10	10	11	SW	Wm. I. Hunt.
St John	Hardin	777	18	58.9	+ 1.8	85	6†	25	28	35	5.22	+3.12	0.90	0	10	13	1	17	...	Sisters of Loretto.
Scott	Kenton	...	16	59.2	+ 1.5	85	7	26	27	28	3.72	+1.47	1.73	0	11	8	9	14	S	E. B. Wilson.
Shelby City	Boyle	1087	20	59.7	+ 2.2	85	6†	26	27	37	6.14	+4.15	1.78	0	8	14	7	10	W	H. F. Ewing.
Shelbyville	Shelby	759	25	57.6	+ 1.2	85	6	26	27	30	4.68	+2.55	1.80	0	9	18	4	9	S	C. R. Burnett.
Taylorsville	Spencer	489	12	58.4	+ 2.6	84	7	25	28	33	5.46	+3.13	1.34	0	10	10	7	14	S	E. D. Bourne.
Williamstown	Grant	943	11	60.0	+ 3.0	88	6	23	27	31	5.30	+2.44	2.30	0	8	11	8	12	...	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	60.1	+ 3.6	90	6	23	28	46	6.14	+3.32	2.20	0	14	6	15	10	...	G. W. Cann.
Berea	Madison	1070	13	60.6	+ 2.5	90	6	26	27	43	7.06	+4.96	1.97	0	11	19	3	9	NE	C. F. Rumold.
Catlettsburg	Boyd	534	25	...	...	...	...	...	...	...	3.96	+1.51	1.10	0	10	...	...	...	...	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	...	...	...	...	...	...	...	4.96	+2.79	1.85	0	9	15	7	9	S	J. V. Oldham.
Farmers	Rowan	668	8	58.7	...	91	6	22	28	37	5.92	...	1.97	0	6	18	6	7	...	Lee Craycraft.
Hazard	Perry	...	0	...	...	...	...	...	...	...	3.95	...	1.65	0	9	...	...	...	...	Kelly E. Watts.
Jackson	Breathitt	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
London	Laurel	...	0	...	...	...	...	...	...	...	6.04	...	2.25	0	10	...	...	...	...	C. R. Lee.
Louisa	Lawrence	...	2	...	...	...	...	...	...	...	3.37	...	1.05	0	9	...	...	...	...	Lucien S. Johnson.
Manchester	Clay	...	3	...	...	...	...	...	...	...	4.39	...	0.97	0	8	...	...	...	...	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	59.0	+ 2.0	90	7	26	27	42	5.91	+3.64	1.65	0	14	17	5	9	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	59.9	+ 2.7	83	6	22	28	39	3.49	+1.19	1.55	0	9	20	6	5	...	B. H. Perkins.
Mount Sterling	Montgomery	930	24	57.8	+ 3.0	83	7	26	27	27	5.97	+3.57	2.70	0	10	16	6	9	W	H. Clay McKee.
Pikeville	Pike	...	6	...	...	...	...	...	...	...	2.40	...	0.84	0	9	...	...	...	...	I. M. Williams.
Richmond	Madison	926	22	61.3	+ 3.4	87	6†	26	27	31	6.85	+4.60	2.00	0	11	14	3	14	...	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	60.6	...	86	8†	25	28	38	2.13	...	1.10	0	5	22	1	8	S	O. A. Lund.
Williamsburg	Whitley	939	18	59.7	− 0.2	85	6†	23	28	37	5.09	+2.87	2.30	0	9	11	9	11	W	N. C. Jones.
State averages and extremes		...	...	59.7	...	91	6	22	28	46	5.10	...	3.95	0	9	13	8	10	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for October, 1914.

STATIONS.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Section.																																	
Beaver Dam‖	G									2.75	.80			.20	.56	.31		.44															5.06
Mandville‖	M								2.67	*	.35		.10	.26			.59	.06															4.03
Calhoun	G					T	T		.12	1.90	.78		T.	.38	.67	.20	.08	.51				.01				T.							4.65
Earlington	G								T.	2.35	.69			.32	.84	.09	.06	.12				T.											4.47
Hopkinsville	C								.80	3.95	.45			.50	.30	.12		.80	.10														7.02
Owensboro‖	O									.96	.74			.12	.25	1.65	.05																3.77
Paducah‖	O									1.85	1.15			.36			.20																3.56
Central Section.																																	
Alpha	C								.16	1.70	.40			1.25	2.55	1.10	.30	.31															7.77
Anchorage	O			.04				T.	.33	.94	.21			.34	1.86	.71	.31	.05															4.79
Bardstown‖	S								.19	1.10	1.18			.16	.33	1.95	.83	.65															6.39
Bowling Green‖	G									2.20	3.45	.10		.25	.75	.45	.04		.15														7.39
Burnside‖	C			.15					.08	.03	1.31	.22		.30	.74	2.30	.85	.16	.27								T.	.02					6.43
Cloverport‖	O								T	1.00	.63	.03		.23	.19	.23	.44	.17	.03														2.95
Edmonton	G																																
Eubank‖	C										1.22	.71			.80	2.25	1.02	.15	.72														6.87
Frankfort‖	K						.05		.03	T.	.49	.39		.08	.39	1.29	.49	.50	T.									T.					3.71
Franklin	G					.20			2.14	3.24	.62			.18	1.30	.24	T.	.57															8.49
Greensburg‖	G			.05		.05				.12	2.00	.28		.09	.57	1.25	1.10	1.46	.25							.01							7.23
High Bridge‖	K			.02	.01				.10	.03	.98	.47		.05	.56	1.50	.82	.39	.05														4.98
Irvington	O									1.65	.45		T.	.10	.82	.38	.11	.47															3.98
Leitchfield	G				T.					2.54	.46			.28	.98	.28	*	.97															5.51
Lexington ***	K			.02		.06		T.	.05	.72	1.21		T.	.57	1.21	.89	.06	.51									.02			T.			5.32
Loretto	S			.03	.02	.03	.01		.18	1.61	.56	.01	.02	.46	1.05	1.95	.10	.66	.02	T.								.04	T.				6.75
Louisville***	O			.01	T.	.02		T.	.19	.53	.31			.19	.77	.26	.02	.12			T.					T.	T.						2.42
Do. (Cherokee Park)	O			.03				.04	.10	.82	.38			.23		1.32		.22															3.14
St. John‖	S						.10			.90	.87	.63		.20	.73	.74	.41	.58	.06														5.22
Scott	L						T.		.18	.06	.44			.35	.53	1.73	.04	.31	.02								.05	.01		T.			3.72
Shelby City	K			.04					.04	1.51	.58			.82	.80	1.78		.57															6.14
Shelbyville‖	S								T.	.50	.53	.42		.20	.10	1.80	.58	.50	.05														4.68
Taylorsville	S			.02		T.		T.	.09	1.30	.42			.33	1.34	1.15	.01	.76									.04						5.46
Williamstown‖	L				T.		T.		.04		.25	.35		T.	.85	2.30	1.10	.31	.10														5.30
Eastern Section.																																	
Beattyville	K			.14	.12				.04	.34	.68	.10		.10	.92	2.20	.76	.08	.56						.04					.06			6.14
Berea	K			.08	.11	T.				.91	1.14			.90	1.10	1.97		.70	.09							.02	.04						7.06
Catlettsburg‖	B				T.					.64	.08	.64			.44	.60	1.10	.04	.16						.08			.18		T.	T.		3.96
Falmouth‖	L								.06		.26	.50		.20	.60	1.85	1.23	.11	.15														4.96
Farmers	L										1.90	.12		.78	.55	1.97	.60																5.92
Hazard‖	K			T.	.23			T.	T.		.29				.26	.83	1.65	.08	.52						T.	.04		.05			T.		3.95
Jackson‖	K																																
London‖	C			.25	.10					.12	.91	.18		T.	.84	2.25	.93	.12	.34														6.04
Louisa‖	B									.76	.14	.30			.27	.45	1.05	.05							.25			.10					3.37
Manchester‖	K			.11	.10				.01			.55		T.	.94	.89	.82		.97														4.39
Maysville‖	O				.06				.05	.07	.48	.72			.68	1.65	1.12	.22	.55	.03								.18		.08	.02		5.91
Middlesboro	C			.27							.10			.32	.75	1.55	.07	.30	.10	.03													3.49
Mount Sterling	L			T.	.04			.18		T.	.92			.03	.63	2.70	.85	.35	.24								.03	T.			T.		5.97
Pikeville‖	B				T.			.26			T.				.12	.16	.84	.12	.50						.16	.08		.16					2.40
Richmond‖	K			T.	.15				T.	.11	1.00	1.17			.60	2.00	.80	.40	.60							T.	.01	.01					6.85
Weeksbury	B			.20											.20	1.10	.30	.33															2.13
Williamsburg ‖	C			.16	.31					T.	.35	.33			.36	2.30	.75	.30	.23							T.	T.	T.					5.09

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

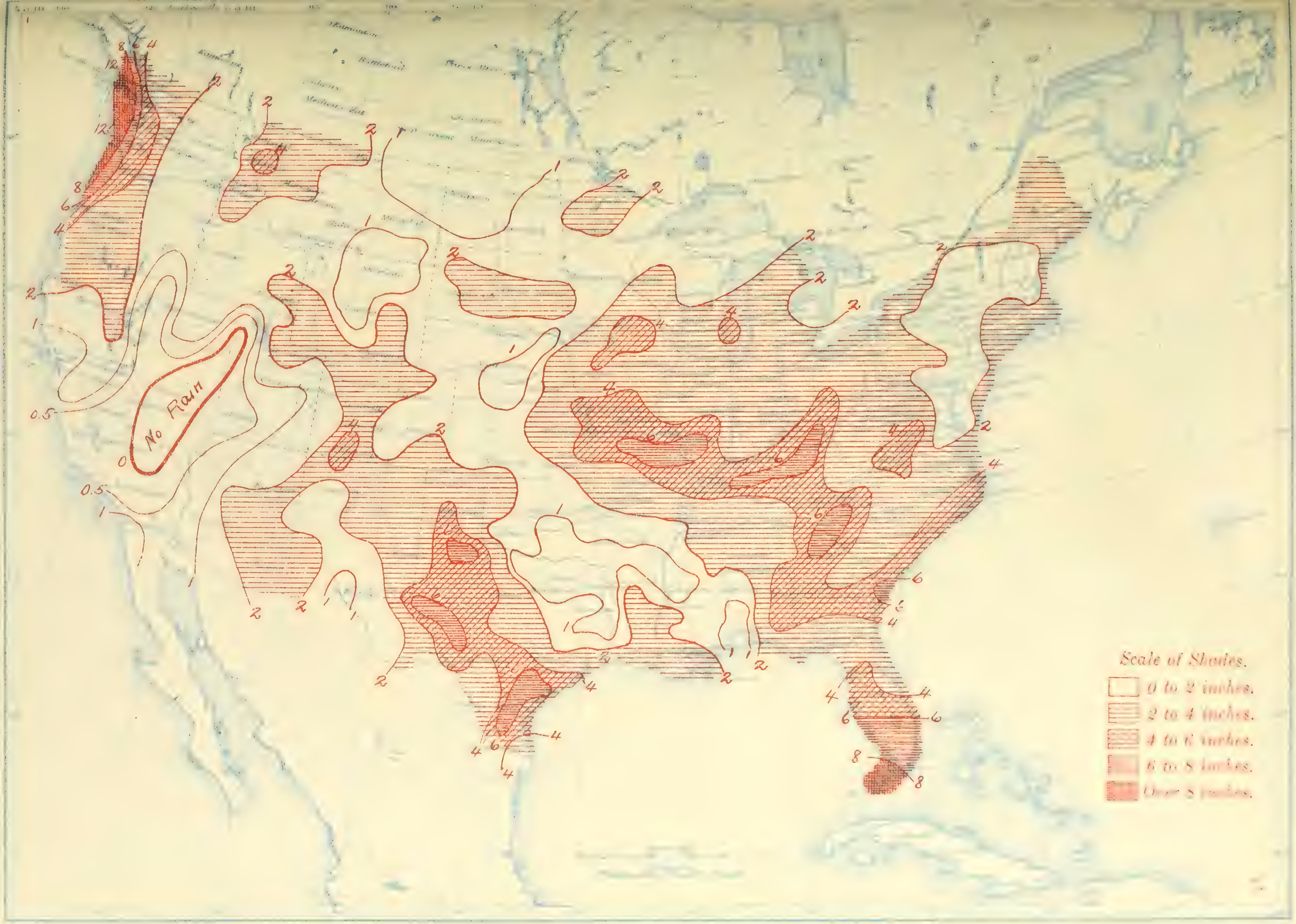
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for October, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Section.																																	
Beaver Dam *	Maximum	81	82	78	79	80	86	86	81	73	77	71	71	57	59	60	59	56	72	76	79	82	80	79	79	56	54	49	56	54	64	68	70.5
	Minimum	50	52	57	56	55	61	61	66	65	64	57	46	56	50	51	47	48	50	50	54	57	55	55	50	52	47	29	28	42	30	33	50.8
Blandville	Maximum	79	74	76	73	78	81	77	79	72	74	68	67	62	59	61	55	64	72	72	69	77	76	76	75	59	58	46	57	61	64	68	68.7
	Minimum	58	59	62	60	60	61	63	65	62	62	54	51	49	45	45	47	54	48	51	57	63	60	54	55	53	43	30	31	40	39	43	52.4
Calhoun	Maximum	83	84	76	79	81	89	86	83	77	78	75	73	65	57	58	61	57	76	79	82	84	82	84	82	73	59	53	57	57	68	71	73.2
	Minimum	55	52	61	56	56	60	60	61	62	62	53	45	51	48	46	47	49	48	50	52	56	54	50	49	52	45	28	27	42	32	35	49.8
Earlington *	Maximum	87	83	80	77	83	90	89	83	72	80	75	75	53	57	55	61	63	80	81	85	85	85	84	82	65	56	53	60	58	70	75	73.6
	Minimum	52	51	51	58	59	57	58	60	63	63	54	43	44	47	42	47	48	50	46	50	55	46	47	49	50	48	29	26	39	32	36	48.4
Hopkinsville	Maximum	80	76	79	78	77	84	82	78	75	78	73	74	70	79	57	60	58	73	76	77	81	79	78	71	58	57	52	58	57	63	68	71.2
	Minimum	54	55	62	68	56	59	60	63	63	63	54	44	52	53	44	44	48	46	47	52	52	52	52	54	48	47	29	25	32	30	33	49.7
Owensboro *	Maximum	79	77	74	75	83	83	85	81	73	75	73	71	67	57	57	58	70	74	79	78	79	79	78	76	55	48	46	55	61	57	67	70.0
	Minimum	52	54	52	59	55	60	60	65	64	63	55	46	53	53	53	46	50	60	49	54	56	56	56	50	50	44	29	29	43	33	37	51.2
Central Section																																	
Alpha	Maximum	76	72	63	74	75	77	80	71	71	72	70	71	62	60	62	58	53	60	70	70	73	73	73	72	57	56	51	54	57	61	66	66 5
	Minimum	50	53	58	61	59	61	60	67	70	70	61	49	59	59	58	52	51	52	57	56	52	53	49	50	56	51	33	27	47	34	33	53.2
Anchorage	Maximum	74	79	72	74	81	87	86	78	74	79	70	71	62	57	62	64	61	68	74	80	79	79	80	74	64	54	46	54	49	60	61	69.5
	Minimum	58	52	58	55	55	58	57	58	63	62	50	42	54	53	57	54	51	45	45	52	49	46	58	48	51	39	25	25	39	30	32	49.1
Bardstown *	Maximum	83	85	74	80	82	89	89	85	71	80	80	76	60	57	63	63	64	70	79	82	83	84	81	80	57	59	51	60	55	65	71	72.8
	Minimum	52	52	54	61	57	61	60	63	65	62	60	43	50	56	55	52	49	48	49	52	52	49	51	50	52	49	29	27	45	31	34	50.6
Bowling Green*	Maximum	84	79	75	81	83	88	86	81	70	81	74	73	60	56	59	60	58	71	77	77	79	80	80	78	57	56	50	58	64	65	67	71.2
	Minimum	52	52	55	55	56	58	60	62	61	61	56	44	50	46	46	43	49	47	46	45	52	50	49	48	48	47	28	25	30	31	32	47.9
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank*	Maximum	78	75	77	79	79	85	85	78	74	73	72	75	72	64	62	61	56	59	75	76	76	77	76	..	77	59	45	56	54	63	67	a70.2
	Minimum	48	50	54	56	57	60	60	60	60	59	53	45	50	55	56	50	47	46	42	47	48	46	47	48	..	49	27	22	27	27	28	a47.5
Frankfort	Maximum	69	69	67	70	71	77	78	73	69	71	68	64	61	57	62	62	56	55	64	67	67	69	66	68	67	55	43	48	48	50	56	63.5
	Minimum	50	49	59	60	56	59	58	64	64	61	60	42	55	55	56	54	49	49	46	52	51	46	49	48	51	44	28	28	46	33	32	50.1
Franklin	Maximum	81	81	78	76	80	87	88	78	72	79	73	77	63	57	58	60	56	72	79	75	80	77	80	76	65	57	48	57	62	65	69	71.2
	Minimum	56	57	62	62	62	63	66	65	64	63	59	48	55	49	52	46	49	51	51	59	57	55	54	54	55	46	31	30	42	36	37	52.8
Greensburg*	Maximum	81	82	69	78	81	87	88	75	70	79	70	75	60	58	53	54	52	50	59	76	80	78	77	78	56	60	47	58	57	63	69	68.4
	Minimum	48	50	57	59	56	59	60	63	64	60	51	43	47	57	53	..	..	..	..	55	50	47	48	49	54	50	30	24	33	28	28	d49.0
Irvington	Maximum	75	75	73	73	78	81	83	77	72	78	70	70	65	60	61	61	59	68	74	80	79	78	77	75	66	55	47	55	52	60	65	69.1
	Minimum	50	52	60	58	58	57	60	60	60	61	55	45	53	50	53	50	50	50	50	58	56	54	53	53	50	47	30	29	44	52	37	51.5
Leitchfield	Maximum	77	76	72	75	77	82	84	77	72	78	68	72	60	57	61	60	55	68	74	76	76	75	75	74	56	55	48	55	53	60	66	68 2
	Minimum	54	53	62	56	57	61	62	64	64	63	58	45	50	49	52	47	48	49	48	54	53	54	50	50	50	47	29	26	43	30	32	50.3
Lexington	Maximum	73	75	67	76	77	83	84	78	69	73	68	69	60	60	62	60	58	61	70	76	74	74	74	71	54	52	42	53	50	57	64	66.6
	Minimum	50	52	60	60	62	63	62	64	61	61	55	48	54	54	54	47	48	47	49	57	57	54	59	54	50	34	26	29	41	36	39	51.2
Loretto	Maximum	79	78	72	76	77	84	84	77	70	78	72	71	65	60	63	62	60	63	73	77	78	77	75	76	67	55	50	55	52	61	65	69.4
	Minimum	47	47	59	57	55	58	57	64	63	62	58	42	56	54	55	51	47	46	45	54	49	46	47	48	52	48	28	26	45	28	32	49.2
Louisville	Maximum	76	79	73	73	79	84	84	78	73	77	70	70	63	58	62	60	60	69	72	80	79	77	79	76	56	53	47	54	51	60	66	69.0
	Minimum	54	56	61	61	61	64	64	65	64	62	53	48	56	54	56	49	49	50	50	57	56	55	58	55	49	35	30	32	42	39	40	52.4
Do. (Cherokee Park)	Maximum	74	76	72	73	78	82	81	78	74	77	69	69	64	58	62	62	60	66	71	75	76	75	75	73	69	55	47	54	52	59	64	68.4
	Minimum	49	51	59	59	58	61	61	66	64	63	58	44	56	55	57	53	50	49	46	54	50	50	53	51	50	46	29	30	47	33	34	51.2
St. John *	Maximum	76	78	72	74	79	85	85	76	70	79	71	72	62	56	62	60	60	68	75	78	67	74	77	74	55	57	47	55	54	63	66	68.6
	Minimum	52	53	54	58	56	58	61	65	64	62	57	44	48	55	51	49	48	45	49	50	53	52	51	49	51	48	28	25	28	29	31	49.2
Scott	Maximum	77	76	74	74	80	82	85	81	75	77	71	68	63	61	60	62	58	57	71	77	75	76	76	71	62	54	46	54	54	62	65	68.5
	Minimum	49	49	56	59	57	60	58	65	64	62	55	41	54	54	55	54	47	47	45	50	50	50	53	57	48	43	26	29	37	34	38	49.9
Shelby City	Maximum	76	76	70	80	79	85	85	78	73	75	72	75	67	60	61	62	56	66	75	78	74	73	75	74	70	55	48	55	52	63	70	69.6
	Minimum	51	49	58	59	57	59	58	63	62	60	58	43	57	56	55	51	46	48	45	55	50	47	49	51	53	48	26	27	39	32	33	49.8
Shelbyville *	Maximum	74	68	70	71	77	85	84	75	72	74	68	67	58	57	57	57	57	60	72	77	75	72	74	72	52	50	47	52	43	60	66	65.9
	Minimum	50	49	57	59	56	58	58	63	61	61	58	51	55	54	55	50	47	46	45	47	50	47	52	48	50	45	26	27	42	30	33	49 3
Taylorsville	Maximum	75	77	71	74	77	82	84	76	71	77	68	70	64	59	62	61	60	65	71	75	75	75	74	73	64	55	46	53	52	59	62	68 0
	Minimum	47	49	59	57	53	58	56	63	63	61	59	41	57	55	56	51	49	48	43	52	48	44	47	46	52	16	27	25	45	29	29	48.9
Williamstown *	Maximum	76	77	76	75	79	88	86	83	73	76	73	70	61	60	61	63	60	62	70	78	85	78	76	76	58	55	49	55	52	63	68	69.7
	Minimum	19	50	49	58	58	61	62	64	63	61	55	46	55	50	50	52	45	47	48	50	54	51	54	53	58	43	23	29	32	35	53	50.3
Eastern Section.																																	
Beattyville *	Maximum	80	81	66	84	85	90	89	85	79	78	77	80	62	67	64	64	57	68	79	84	81	78	76	80	59	61	48	62	56	67	74	73 0
	Minimum	45	44	50	56	55	59	56	60	56	58	55	46	51	56	56	52	43	45	45	47	50	45	46	51	50	51	27	23	26	30	28	47 2
Berea	Maximum	79	79	78	84	78	90	88	89	74	75	71	77	63	63	62	62	63	65	75	79	76	73	77	75	66	56	47	57	56	62	70	71.2
	Minimum	51	49	56	59	56	59	58	58	62	62	56	43	58	56	56	52	45	47	56	63	56	44	34	65	53	46	26	27	38	31	32	50.1
Farmers	Maximum	77	79	66	80	82	91	87	85	78	78	72	78	60	70	65	60	63	72	79	80	77	76	77	80	58	65	46	58	53	62	60	71.4
	Minimum	41	44	51	54	52	56	52	59	56	52	57	52	52	57	53	47	42	40	47	45	40	41	51	53	54	45	24	22	32	28	26	46.0
Maysville*	Maximum	84	82	72	81	82	89	90	86	76	79	75	75	58	70	63	68	61	60	76	80	81	81	78	77	58	61	45	60	52	66	72	72.2
	Minimum	45	44	45	53	54	55	55	56	57	61	52	44	44	54	55	55	43	45	43	42	48	45	47	47	48	45	26	27	28	30	30	45 9
Middlesboro	Maximum	77	71	64	78	79	83	80	81	80	75	76	78	64	65	63	63	56	60	73	74	78	78	72	75	70	64	53	57	62	62	67	70.3
	Minimum	50	18	54	52	53	60	59	58	56	59	59	53	54	54	58	50	48	47	46	52	53	51	48	55	49	53	31	22	44	29	28	49.5
Mount Sterling*	Maximum	77	77	67	77	78	82	83	80	72	74	69	69	60	67	62	60	60	62	62	73	73	73	71	71	56	56	41	52	52	57	60	66.9
	Minimum	50	50	50	58	57	59	57	60	60	60	57	44	51	56	56	53	46	46	44	48	50	46	48	53	52	48	26	27	30	33	34	48 7
Richmond *	Maximum	80	80	80	80	80	87	87	81	73	75	75	73	61	62	62	62	58	65	75	79	81	79	80	80	56	57	50	56	52	62	69	70.9
	Minimum	51	51	57	59	60	63	62	66	68	65	60	52	54	52	52	50	47	50	47	57	53	50	53	56	53	48	26	30	40	34	38	51.7
Weeksbury	Maximum	81	81	80	83	80	84	84	86	76	84	86	82	77	72	65	65	60	65	74	75	75	77	70	63	64	66	55	60	60	61	68	72.9
	Minimum	45	46	46	50	53	59	54	58	55	58	60	57	51	57	58	56	43	43	42	46	48	45	52	55	53	50	29	25	37	33	30	48 2
Williamsburg*	Maximum	80	78	79	80	81	85	85	82	82	76	75	76	78	64	64	63	62	60	73	72	77	78	75	76	72	55	46	60	60	61	68	71.7
	Minimum	48	50	50	54	54	58	60	59	56	58	53	54	53	54	57	50	45	43	47	48	51	49	47	48	49	47	30	23	24	30	29	47.7

*Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


No Rain
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
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CLIMATOLOGICAL DATA

KENTUCKY SECTION

NOVEMBER 1914

BY

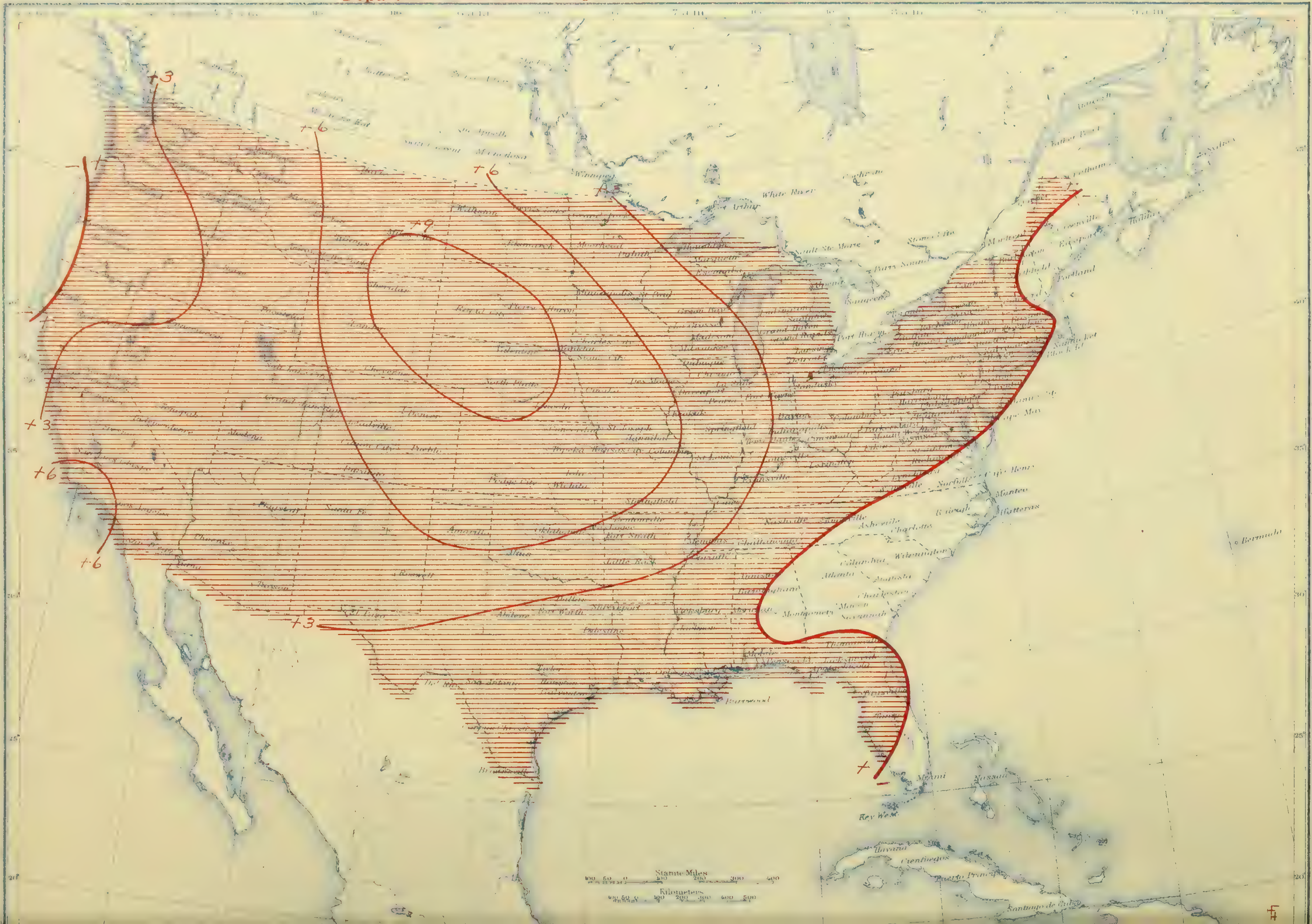
FERDINAND J. WALZ

PROFESSOR AND SECTION DIRECTOR

1862 1889

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 20, 1914

Departure of the Mean Temperature from the Normal, November, 1914.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XIX. Louisville, Ky., November, 1914. No. 11

GENERAL SUMMARY.

The weather during the month was characterized by remarkable extremes in temperature, scarcity of precipitation, and an unusually large percentage of sunshine. The first two weeks and the last week were unseasonably warm, while on the other hand the period 16th-23d was one of the coldest 8-day periods in November on record for the State. At some stations the 20th was the coldest November day since State records were established in 1889.

The continued dry weather prevented stripping of tobacco and its preparation for market, but this situation was relieved by the rains of the last two days. Streams ran low and stock water again became scarce in many localities.

PRESSURE.

During most of the month weather conditions were controlled by high areas, the centers of low pressure passing far to the northward. The most notable exception was the disturbance that moved northward from the middle Gulf coast on the 28th and caused the rains of the last two days.

The mean sea-level pressure, as determined from the records of two stations, was 30.16 inches. The highest was 30.58 inches at Louisville on the 23d, and the lowest 29.68 inches at Lexington on the 15th.

TEMPERATURE.

The mean temperature for the State, computed from the records of 36 stations, was 46.9°, which is 0.9° above normal. The most notable temperature feature was the cold period from the 16th to the 23d inclusive, when minimum temperatures of 20° or lower were registered on most days. At Louisville this was the coldest 8-day period in November since 1880. On the 20th minimum temperatures at the various stations ranged between 5° and 11°, the lowest for the State, 5°, occurring at Bowling Green, Edmonton, Eubank and Hopkinsville. This minimum was equaled in November, 1903, while the only lower record, a minimum of −2°, was registered in November 1893.

Temperatures considerably above normal prevailed during the periods 1st-8th, 11-15th and 25-30th. Maximum temperatures of 80° and over were registered at several stations on the 2d, 3d and 7th, the highest for the State being 83° at Earlington on the 2d.

HUMIDITY.

At Louisville the average relative humidity was 75 per cent. at 7 a. m. and 55 per cent. at 7 p. m.

PRECIPITATION.

The average precipitation for the State, computed from the records of 47 stations, was 1.23 inches, which is 2.36 inches less than the normal amount for November. In only two Novembers since State records were established has the average precipitation been less, viz., in 1904, 0.89 inch, and in 1912, 1.22 inches. Most of the central and southern counties received from 1 to 2 inches, but over large sections in the western, north-central, northeastern and southeastern parts of the State the monthly amounts were less than 1 inch. Amounts at the various stations ranged between 0.68 inch at Irvington and 2.52 inches at Weeksbury. Snow flurries occurred generally over the State on the 19th, but in the more elevated sections the snowfall amounted to 1 to 3 inches. Light showers were general on the 8th, 15th and 16th, but most of the precipitation occurred during the wide-spread rainstorm of the 29-30th.

WIND.

The total wind movement at Louisville was 8723 miles and at Lexington 7837 miles, the average hourly velocity being 12.1 and 10.9 miles, respectively. The maximum velocity for 5 minutes was at the rate of 38 miles per hour from the northwest on the 15th, at both Louisville and Lexington.

SUNSHINE AND CLOUDINESS.

The percentage of sunshine for the month at Louisville was 67 and at Lexington 55, which is considerably above the November average for both stations.

MISCELLANEOUS.

The rapid fall in temperature on the 19th and the accompanying high wind, caused much suffering among live stock that generally had been left unprotected on account of the previous warm weather.

On the 30th a severe windstorm caused considerable damage in the vicinity of Whitesburg, buildings being unroofed and much valuable timber blown down.

Very low stages prevailed in the streams of the State, including the Ohio, during the month. At Cloverport a stage of 0.7 foot occurred on the 23d, which breaks all previous records of low water.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	43.1	−2.9	85	10	6.04	+2.45
1890	48.6	+2.6	81	19	4.87	+1.28
1891	43.5	−2.5	75	10	6.04	+2.45
1892	42.8	−3.2	78	9	3.85	+0.26
1893	44.3	−1.7	79	−2	3.12	−0.47
1894	43.3	−2.7	80	8	1.32	−2.27
1895	45.8	−0.2	85	16	[illegible]	[illegible]
1896	49.3	+3.3	80	11	5.01	+1.42
1897	47.8	+1.8	78	12	4.69	+1.10
1898	43.2	−2.8	80	10	2.79	−0.80
1899	49.8	+3.8	79	20	2.12	−1.47
1900	47.0	+1.0	83	15	7.78	+4.19
1901	41.8	−4.2	82	11	1.52	−2.07
1902	53.4	+7.4	90	20	4.42	+0.83
1903	42.5	−3.5	81	5	3.01	−0.58
1904	44.7	−1.3	79	14	0.89	−2.70
1905	46.4	+0.4	79	14	3.55	−0.04
1906	46.1	+0.1	93	11	5.02	+1.43
1907	44.2	−1.8	75	15	3.49	−0.10
1908	48.6	+2.6	80	8	2.61	−0.98
1909	54.7	+8.7	86	19	2.29	−1.30
1910	41.1	−4.9	78	11	2.04	−1.55
1911	41.6	−4.4	85	9	[illegible]	[illegible]
1912	45.2	−0.8	82	10	1.22	−2.37
1913	50.5	+4.5	81	8	3.25	−0.34
1914	46.9	+0.9	83	5	1.23	−2.36

Climatological data for November, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	49.0	+ 3.9	80	8	8	20	43	1.28	− 1.84	1.00	0.2	3	22	4	4	s	W. T. Austin.
Blandville	Ballard	445	32	50.0	+ 3.4	80	7	9	20	32	1.13	− 3.33	0.76	0.5	5	20	4	6	se	E. W. Horr.
Calhoun	McLean	393	11	50.4	+ 3.0	81	2†	9	20	43	1.47	− 1.73	0.99	0.1	6	17	8	5	sw	W. A. Taylor.
Earlington	Hopkins	370	24	48.9	+ 1.2	83	2†	7	20	43	0.88	− 3.50	0.56	1.0	3	21	1	8	s	Brick Southworth.
Hopkinsville	Christian	524	18	48.4	+ 0.3	79	7	5	20	35	1.32	− 3.16	0.80	0.2	6	22	1	7	s	W. F. Randle.
Owensboro	Daviess	479	17	48.2	+ 0.5	76	2	10	20	34	1.67	− 1.74	0.75	....	4	22	4	4	s	Henry S. Berry.
Paducah	McCracken	341	25	.....	.....	.....	.....	.....	.....	....	0.82	− 3.52	0.66	T.	2	.....	.....	.....	.....	S. A. Fowler.
Central Section.																				
Alpha	Clinton	.....	20	50.2	+ 0.7	78	7	9	20	35	1.35	− 2.38	1.15	2.0	2	19	2	9	w	W. W. Hicks.
Anchorage	Jefferson	700	13	45.2^{b}	+ 1.1	76^{b}	3†	9^{b}	20	37^{b}	1.18	− 1.75	0.53	T.	4	15^{a}	8^{a}	6^{a}	sw	C. E. Barret.
Bardstown	Nelson	637	17	47.6	+ 1.0	80	3†	9	20	45	0.94	− 2.44	0.37	T.	5	18	6	6	se	Chas. M. Talbott.
Bowling Green	Warren	500	25	47.6	+ 0.7	80	7	5	20	41	1.60	− 2.46	1.00	0.3	5	23	2	5	s	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	.....	.....	.....	.....	.....	.....	....	1.09	− 2.58	0.51	0.6	6	.....	.....	.....	.....	K. W. Massey.
Cloverport	Breckenridge	.....	0	.....	.....	.....	.....	.....	.....	....	1.22	....	0.43	T.	5	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	47.0^{d}	+ 0.2	79^{d}	7	5^{d}	20	42^{d}	1.63	− 2.27	0.52	T.	4	18^{d}	7^{d}	1^{d}	.....	Miss Lee Ray.
Eubank	Pulaski	1177	20	45.2^{a}	+ 0.7	79	12	5	20†	50	1.35	− 1.68	0.64	T.	4	15^{a}	9^{a}	5^{a}	s	Mrs. Katie Payne.
Frankfort	Franklin	560	23	45.4	− 0.8	73	14	10	20	41	1.23	2.18	0.68	T.	3	11	14	5	s	Geo. L. Barnes
Franklin	Simpson	691	20	50.4	+ 1.9	81	7	7	20	33	1.51	− 2.02	0.75	T.	5	15	7	8	s	J. E. Newman.
Greensburg	Green	581	22	45.5	+ 0.8	80	7	9	20	45	1.38	− 2.30	0.57	0.5	6	7	7	16	s	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	.....	.....	.....	.....	.....	.....	....	1.61	− 1.37	1.05	0.2	6	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	.....	16	47.3	+ 1.2	77	7	10	20	33	0.68	− 2.72	0.51	T.	3	21	1	8	sw	W. J. Piggott.
Leitchfield	Grayson	635	18	47.0	+ 0.7	74	7†	8	20	37	1.02	− 2.91	0.62	0.4	4	22	2	6	sw	John E. Stone.
Lexington	Fayette	989	26	45.7	+ 1.0	75	7	8	20	29	1.62	− 1.86	1.27	T.	6	16	6	8	sw	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	46.6^{a}	+ 0.4	78	3†	6	20	38	1.14	− 1.98	0.36	0.5	8	18	5	7	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	42	48.5	+ 2.2	77	7	10	20	30	0.75	− 3.43	0.31	T.	4	17	4	9	s	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	.....	4	47.5	......	77	7	6	20	37	1.00	....	0.41	T.	4	17	5	8	sw	Wm. I. Hunt.
St. John	Hardin	777	18	45.0	− 0.5	78	3	8	20	41	0.79	− 2.93	0.34	T.	4	18	3	9	.....	Sisters of Loretto.
Scott	Kenton	.....	16	46.8	+ 2.5	76	2†	9	20	35	1.98	− 0.88	0.59	T.	5	15	8	7	s	E. B. Wilson.
Shelby City	Boyle	1087	20	46.8	+ 4.2	77	7	8	20	39	1.63	− 1.51	1.06	1.2	6	19	4	7	sw	H. F. Ewing.
Shelbyville	Shelby	759	25	43.6	− 0.3	74	7	8	20	35	1.17	− 2.78	0.64	T.	3	21	4	5	w	C. R. Burnett.
Taylorsville	Spencer	489	12	44.4	− 0.1	77	7	10	20	40	1.20	2.16	0.56	0.1	5	20	2	8	sw	E. D. Bourne.
Williamstown	Grant	943	11	46.0	+ 1.2	77	3	7	20†	40	1.22	− 1.14	0.63	T.	4	10	13	7	.....	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	44.2	+ 0.5	80	7	10	20	51	1.10	− 1.87	0.60	1.0	6	13	10	7	w	Miss Sabina E. Cann.
Berea	Madison	1070	13	47.6	+ 0.9	78	7	6	20	39	0.94	− 1.86	0.30	1.2	6	19	4	7	sw	C. F. Rumold.
Catlettsburg	Boyd	534	25	.....	.....	.....	.....	.....	.....	....	0.90	− 2.24	0.28	2.0	5	.....	.....	.....	.....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	.....	.....	.....	.....	.....	.....	....	1.77	− 1.85	0.80	....	5	19	5	6	sw	J. V. Oldham.
Farmers	Rowan	668	8	44.0	......	80	7	10	20	46	1.13	....	0.65	T.	3	22	2	6	.....	Lee Craycraft.
Hazard	Perry	.....	0	.....	.....	.....	.....	.....	.....	....	0.88	....	0.30	2.0	5	.....	.....	.....	.....	Kelly E. Watts.
Jackson	Breathitt	.....	4	.....	.....	.....	.....	.....	.....	....	.....	....	.....	....	.....	.....	.....	.....	.....	.....
London	Laurel	.....	0	.....	.....	.....	.....	.....	.....	....	0.82	....	0.55	T.	5	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	.....	2	.....	.....	.....	.....	.....	.....	....	1.13	....	0.30	3.0	6	.....	.....	.....	.....	Lucien S. Johnson.
Manchester	Clay	.....	3	.....	.....	.....	.....	.....	.....	....	0.81	......	0.35	3.2	6	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	44.6	+ 0.3	80	3	10	20	47	0.79	− 1.19	0.22	T.	5	22	2	6	sw	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	45.0	− 0.9	79	4	12	20	43	1.18	− 2.49	0.56	....	6	21	8	1	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	24	43.5	− 0.8	75	7	8	20	36	1.36	− 2.09	0.41	1.0	5	19	7	4	w	H. Clay McKee.
Pikeville	Pike	.....	6	.....	.....	.....	.....	.....	.....	....	0.82	....	0.26	2.0	6	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	22	48.5	+ 1.7	78	7	8	20	36	1.79	− 0.90	0.90	0.5	6	23	1	6	.....	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	47.4	......	78	7	13	20	44	2.52	....	0.80	3.0	7	23	0	7	s	O. A. Lund.
Williamsburg	Whitley	939	18	44.7	2.5	79	7	11	20‡	50	0.87	− 2.06	0.40	0.5	5	17	7	6	s	N. C. Jones.
State averages and extremes				46.9	......	83	2	5	20	51	1.23	......	1.27	0.4	5	18	5	7	s	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for November, 1914.

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																	
Beaver Dam	G								T.							T.	.25			[illegible]										[illegible]	[illegible]		[illegible]
Blandville	M								.20							[illegible]				.12									[illegible]	[illegible]	[illegible]		[illegible]
Calhoun	G								.08							[illegible]	[illegible]			[illegible]									[illegible]	[illegible]	[illegible]		[illegible]
Earlington	G																[illegible]				.08									[illegible]	[illegible]		[illegible]
Hopkinsville	C								.15							.10				.02									[illegible]	[illegible]	[illegible]		[illegible]
Owensboro	O									.12							.30													[illegible]	[illegible]		[illegible]
Paducah	O									.16							T.				T.									[illegible]			[illegible]
Central Section.																																	
Alpha	C								T.						T.	T.				.20								T.	[illegible]	[illegible]	T		[illegible]
Anchorage	O								.17							.53	T.			T.										[illegible]	[illegible]		[illegible]
Bardstown	S									.10						.33	[illegible]				T.									.09	.37		[illegible]
Bowling Green	G									.07						T	.20				.30	T						T.		[illegible]	[illegible]		[illegible]
Burnside	C									.14						.05	.10				.06									[illegible]	[illegible]		[illegible]
Cloverport	O									.09						.02	.42				T.									[illegible]	[illegible]		[illegible]
Edmonton	G								.52							.28				T.										[illegible]	.45		1.63
Eubank	C																.46				.05									[illegible]	[illegible]		[illegible]
Frankfort	K									T.						.52	T.				T.									[illegible]	[illegible]		[illegible]
Franklin	G								.21							.20				T.								T.	.21	.75	.14		1.51
Greensburg	G									.16						.22	.15				.05	T	T.							.23	.57		1.38
High Bridge	K									.16						.22	.11				.03									.04	1.05		1.61
Irvington	O								T.							.10				T										.51	.07		0.68
Leitchfield	G								T.								.36			.04									*	.62			1.02
Lexington ***	K								.12						.01	.18	T.			T.									.03	.59	.69		1.62
Loretto	S								.17	T.						.35	.02	T.		.02			.01	.02						.19	.36		1.14
Louisville***	O							T.	.13							.31	T.			T.									.03	.28			0.75
Do. (Cherokee Park)	O							T.	.17							.41				T.										.16	.26		1.00
St. John ‡	S														.05	.34	T.				T.									.10	.30		0.79
Scott	L								.18							.59	.64			T.	T.									.20	.37		1.98
Shelby City	K								.12							.21	.10			.12										.02	1.06		1.63
Shelbyville‖	S									T.						.64	.10													T.	.43		1.17
Taylorsville	S								.14							.56	T	T.		.01										.24	.25		1.20
Williamstown	L									.10						.46														.03	.63		1.22
Eastern Section.																																	
Beattyville‖	K									.08						.08	.20				.08									.06	.60		1.10
Berea	K								.18							.10	.04			.12	.20									.30			0.94
Catlettsburg	B									.20						.10	.12				.20										.28		0.90
Falmouth	L									.20						.38	.11													.28	.80		1.77
Farmers	L								.18											T.										.30	.65		1.13
Hazard	K									.25						.12	.13				.08′										.30		0.88
Jackson	K																																
London	C									T.						.05	.20				.02									.05	.50		0.82
Louisa	B									.20						.10	.18				.30									.15	.20		1.13
Manchester‖	K									.04						.05	.17				.10									.10	.35		0.81
Maysville‖	O								T.	.11						.16	.15				T.									.15	.22		0.79
Middlesboro	C								.31	.04					.04	.08														.56	.15		1.18
Mount Sterling	L									.35							.30				.10									.20	.41		1.36
Pikeville	B									.26						.12	.16				.10									.12	.06		0.82
Richmond	K									.23						.05	.26				.05								T	.90	.30		1.79
Weeksbury	B								.80						.50	.40	.22				.20	.10								.30			2.52
Williamsburg ‖	C									.40						.05	.09				.05									T	.28		0.87

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for November, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Section.																																	
Beaver Dam *	Maximum	72	77	77	74	68	77	80	60	55	62	65	69	78	76	62	39	40	45	36	32	49	49	52	65	62	66	68	55	56	65	..	61.0
	Minimum	43	45	48	49	35	34	50	55	31	29	36	39	47	49	57	29	19	18	32	8	18	31	23	26	37	32	44	43	50	53	..	37.0
Blandville	Maximum	71	75	78	74	67	79	80	66	55	64	66	68	69	75	72	41	41	47	38	29	54	53	50	64	64	62	58	51	58	60	..	61.0
	Minimum	46	48	55	54	45	47	56	42	34	36	42	43	46	45	41	27	20	23	14	9	23	32	31	39	40	40	46	46	51	53	..	39.1
Calhoun	Maximum	73	81	80	78	70	71	81	75	56	65	69	71	72	78	70	64	44	48	44	28	51	51	53	67	63	67	62	58	55	66	..	63.7
	Minimum	43	44	51	54	38	37	38	44	28	34	37	41	46	44	57	28	19	19	20	9	21	31	24	33	42	39	47	42	49	53	..	37.1
Earlington *	Maximum	75	83	83	79	73	80	82	50	55	66	71	72	73	66	67	40	41	49	32	30	52	52	55	69	63	67	62	54	55	66	..	62.1
	Minimum	39	47	49	55	36	37	46	50	30	27	34	36	48	41	40	29	17	17	30	7	12	22	22	27	44	40	41	50	49	50	..	35.7
Hopkinsville	Maximum	71	75	77	77	68	78	79	69	52	63	65	68	70	76	68	63	38	47	42	26	51	51	51	64	64	66	58	65	56	63	..	62.0
	Minimum	36	42	41	47	40	37	44	44	30	30	33	39	42	45	56	28	18	17	18	5	17	21	27	33	33	29	44	47	49	53	..	34.9
Owensboro *	Maximum	72	76	72	69	62	64	68	53	53	62	62	69	69	75	60	37	38	46	37	30	49	50	53	63	63	65	63	61	63	67	..	59.0
	Minimum	42	42	52	50	37	40	52	41	29	32	35	40	46	46	48	29	20	20	30	10	18	30	30	32	39	40	46	47	50	53	..	37.5
Central Section																																	
Alpha	Maximum	61	74	73	76	64	71	78	67	54	58	67	70	69	66	62	55	37	46	45	27	42	55	53	57	57	65	57	57	59	60	..	59.4
	Minimum	39	57	60	61	42	36	65	48	39	28	46	38	57	48	55	37	21	19	24	9	25	35	20	27	49	40	48	47	52	54	..	40.9
Anchorage	Maximum	70	72	76	71	63	71	76	..	..	63	61	69	64	74	60	46	36	45	38	25	41	45	48	62	57	66	57	57	57	63	..	[b]58.3
	Minimum	46	39	39	43	31	16	..	..	25	27	33	35	45	46	46	25	16	26	17	9	15	16	14	24	34	35	42	37	47	53	..	[b]32.2
Bardstown *	Maximum	72	79	80	72	68	75	80	64	53	64	65	71	70	75	62	41	41	48	40	26	44	48	52	63	60	65	59	59	69	63	..	60.9
	Minimum	40	45	45	52	36	36	45	52	30	28	35	36	50	45	56	29	18	18	23	9	10	22	17	18	31	33	40	40	40	53	..	34.4
Bowling Green*	Maximum	71	77	78	76	71	75	80	65	58	62	55	69	73	75	62	18	45	48	41	40	47	52	52	65	63	68	63	61	58	66	..	62.1
	Minimum	35	53	46	49	39	34	46	50	29	26	33	34	36	39	41	27	16	16	19	5	15	26	20	24	34	32	43	39	40	45	..	33.0
Edmonton	Maximum	70	78	78	78	66	74	79	70	60	65	60	70	70	70	64	60	40	47	40	37	45	49	..	..	..	..	54	60	64	63	..	[d]62.0
	Minimum	45	45	42	45	35	32	43	38	33	29	25	30	42	33	42	30	16	16	17	5	17	17	..	..	..	..	23	42	44	43	..	[d]31.9
Eubank*	Maximum	67	74	75	75	75	74	77	69	65	60	63	79	69	69	63	56	39	45	42	40	41	49	50	59	..	64	66	60	58	63	..	[a]61.6
	Minimum	29	35	38	39	31	31	31	38	31	23	23	29	40	42	43	31	11	15	17	5	5	17	15	16	26	..	35	43	42	51	..	[a]28.8
Frankfort	Maximum	58	61	67	63	59	58	69	66	48	59	59	68	70	73	70	60	31	44	45	29	45	45	44	61	58	64	58	59	62	64	..	57.2
	Minimum	34	42	39	46	34	35	41	40	33	28	38	31	46	40	55	29	20	17	22	10	19	28	15	20	34	33	38	38	47	52	..	33.5
Franklin	Maximum	72	75	79	78	66	77	81	68	50	62	64	70	70	69	62	61	40	48	40	27	48	54	51	65	62	68	58	56	57	62	..	61.3
	Minimum	42	51	54	55	45	44	56	46	32	33	41	42	50	50	56	28	20	23	16	7	21	31	27	34	41	41	49	45	48	53	..	39.4
Greensburg*	Maximum	71	75	78	76	67	75	80	67	49	63	65	72	72	73	61	41	40	48	43	26	45	52	49	61	60	68	62	60	62	62	..	60.9
	Minimum	33	39	40	45	34	31	38	45	32	25	31	30	32	39	46	30	17	17	21	9	10	17	16	20	23	28	28	39	41	47	..	30.1
Irvington	Maximum	69	72	75	70	62	71	77	69	49	50	59	68	60	72	65	47	36	44	38	28	45	45	46	61	59	63	61	55	59	64	..	58.0
	Minimum	43	42	42	52	38	38	55	43	31	30	38	42	40	45	47	26	20	20	19	10	20	30	19	32	42	46	47	40	49	53	..	36.6
Leitchfield	Maximum	71	73	77	72	64	73	74	64	49	60	62	68	68	74	62	58	38	45	38	25	46	47	48	65	60	64	59	53	60	65	..	59.4
	Minimum	40	43	47	49	37	36	40	40	30	29	34	38	14	41	55	27	16	18	18	8	16	26	21	29	37	35	43	41	48	53	..	34.7
Lexington	Maximum	66	69	74	69	59	67	75	63	42	57	55	67	66	70	64	41	33	41	36	23	39	43	41	58	55	63	54	57	58	60	..	55.5
	Minimum	42	51	49	51	11	41	55	35	33	30	40	39	46	44	41	22	18	21	15	8	16	28	22	29	42	42	41	37	48	51	..	35.9
Loretto	Maximum	69	73	78	74	64	72	78	70	49	61	..	68	68	73	65	59	38	45	40	24	44	47	48	61	59	65	59	55	61	61	..	[a]59.6
	Minimum	34	41	42	52	35	34	55	42	28	24	24	..	45	38	55	28	17	14	21	6	17	29	12	21	43	40	39	40	46	53	..	[a]33.6
Louisville	Maximum	69	75	76	72	63	71	77	65	47	60	60	68	68	73	61	39	37	44	38	24	46	45	46	61	58	65	58	58	59	62	..	58.2
	Minimum	48	53	53	55	15	44	59	39	33	33	15	43	49	45	39	24	22	24	15	10	20	33	24	31	45	48	44	39	49	54	..	38.8
Do (Cherokee Park)	Maximum	68	68	75	70	67	68	77	72	46	60	59	68	68	73	68	61	35	43	42	26	45	44	44	61	57	64	61	57	59	62	..	58.9
	Minimum	41	45	45	55	41	38	52	41	31	29	41	34	48	39	56	28	20	19	26	6	12	30	17	24	41	43	45	36	47	53	..	36.1
St. John *	Maximum	69	76	78	76	65	72	78	64	49	60	61	68	70	72	61	40	39	44	37	25	45	49	46	61	59	64	62	54	60	63	..	58.9
	Minimum	33	40	42	46	34	34	41	48	28	28	32	34	41	43	48	27	15	16	19	8	9	19	17	20	30	31	31	30	40	49	..	31.1
Scott	Maximum	68	76	76	71	63	65	76	69	57	57	57	67	66	69	69	57	38	41	36	30	46	43	45	59	59	65	52	57	57	59	..	58.3
	Minimum	43	45	44	51	35	42	50	37	32	29	37	38	50	37	53	25	19	18	21	9	18	28	16	24	38	43	46	33	46	52	..	35.3
Shelby City	Maximum	73	72	75	75	66	73	77	72	48	60	60	70	68	70	66	60	37	47	39	26	43	46	43	61	57	64	58	55	58	61	..	59.3
	Minimum	38	49	42	53	38	34	50	41	35	25	35	32	45	39	54	29	18	15	23	8	17	26	15	22	38	37	38	37	45	52	..	34.3
Shelbyville *	Maximum	67	69	71	68	65	69	74	52	46	57	58	65	66	69	58	35	32	37	31	21	37	41	43	57	58	61	57	57	58	60	..	54.6
	Minimum	35	35	43	47	35	34	48	50	28	27	31	35	42	41	47	27	17	16	20	8	10	19	14	27	35	35	39	35	47	48	..	32.6
Taylorsville	Maximum	67	70	76	71	63	66	77	67	45	59	57	67	68	72	63	60	36	42	38	26	43	45	44	60	57	64	57	58	59	62	..	58.0
	Minimum	31	37	37	41	30	31	38	42	27	24	31	27	41	37	55	28	17	16	20	10	17	22	13	20	31	28	33	38	48	53	..	30.8
Williamstown *	Maximum	75	76	77	72	63	69	76	54	48	50	63	69	69	73	62	46	39	55	39	30	45	45	47	60	60	67	56	59	57	60	..	58.7
	Minimum	41	45	46	51	39	40	40	52	30	28	28	31	49	39	40	27	18	19	21	7	7	21	19	20	39	40	45	32	34	48	..	33.2
Eastern Section.																																	
Beattyville *	Maximum	75	77	79	78	66	74	80	73	54	64	64	75	73	72	70	43	42	52	43	31	45	51	52	63	13	70	62	58	58	62	..	61.0
	Minimum	30	40	34	37	30	28	31	40	38	23	25	24	25	32	34	35	19	12	15	10	11	14	12	13	16	25	27	32	40	49	..	26.7
Berea	Maximum	70	74	77	75	67	71	78	70	45	60	61	69	71	72	64	59	37	46	39	29	43	49	46	59	58	65	60	59	60	64	..	59.9
	Minimum	39	50	42	56	35	34	55	40	32	26	38	33	50	40	54	30	18	15	21	6	19	30	11	20	38	45	43	41	50	52	..	35.4
Farmers	Maximum	60	54	78	75	65	70	80	72	50	61	61	70	70	70	70	62	38	48	38	27	40	47	46	41	48	67	57	58	60	59	..	58.1
	Minimum	26	41	32	42	28	31	35	34	32	22	33	25	37	37	55	33	20	12	18	10	18	24	12	12	32	28	31	38	50	51	..	30.0
Maysville*	Maximum	72	74	80	73	64	71	79	61	51	60	62	71	72	74	70	40	40	47	43	30	45	46	45	60	62	68	55	59	69	63	..	60.2
	Minimum	30	41	36	37	37	45	35	48	33	24	24	29	30	31	35	31	19	15	15	10	11	18	13	13	17	34	10	34	33	50	..	28.9
Middlesboro	Maximum	66	75	76	79	74	70	76	72	57	57	62	67	68	64	70	64	39	45	18	33	41	53	51	53	55	62	56	58	58	62	..	60.4
	Minimum	27	34	33	39	33	27	33	36	38	24	29	29	32	36	55	37	21	15	21	12	15	18	15	15	22	23	31	33	50	52	..	29.5
Mount Sterling*	Maximum	64	67	72	69	59	63	75	63	43	56	56	64	58	62	61	37	34	40	38	24	40	44	39	50	54	62	58	58	57	60	..	54.
	Minimum	36	44	42	49	38	38	39	51	35	27	29	34	36	45	43	31	19	17	19	8	9	19	18	22	26	40	39	40	39	52	..	32.
Richmond *	Maximum	70	74	77	74	64	71	78	69	55	59	61	70	69	76	65	41	37	46	37	25	42	47	48	60	66	66	56	60	63	62	..	59.
	Minimum	42	49	50	54	41	40	45	53	36	29	39	38	49	44	55	30	18	20	31	8	19	28	22	27	30	38	42	40	52	53	..	37.
Weeksbury	Maximum	70	74	76	77	65	68	78	74	51	59	62	72	69	63	69	67	55	14	47	17	40	47	57	59	60	66	61	59	60	71	..	62.
	Minimum	33	30	37	50	38	31	42	45	36	25	27	29	39	38	49	35	22	18	27	13	15	28	20	19	18	32	55	26	48	52	..	32.
Williamsburg*	Maximum	69	74	76	78	65	74	79	78	18	60	68	62	74	70	65	43	28	47	48	28	48	55	50	52	55	65	60	60	63	66	..	60.
	Minimum	31	42	38	40	33	29	29	39	38	25	25	29	32	38	39	38	21	16	19	11	11	15	11	16	22	23	30	34	40	51	..	28.

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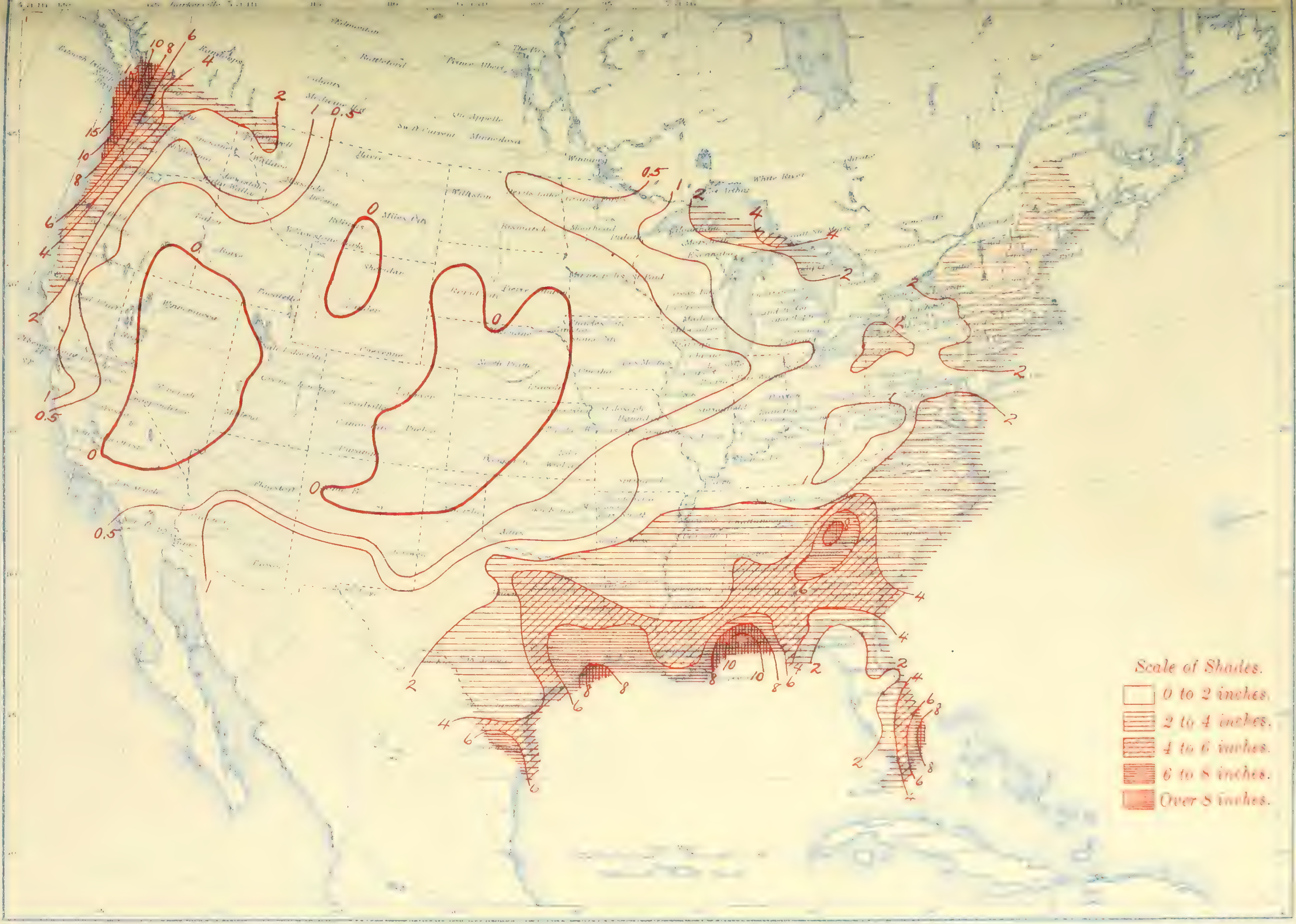
* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

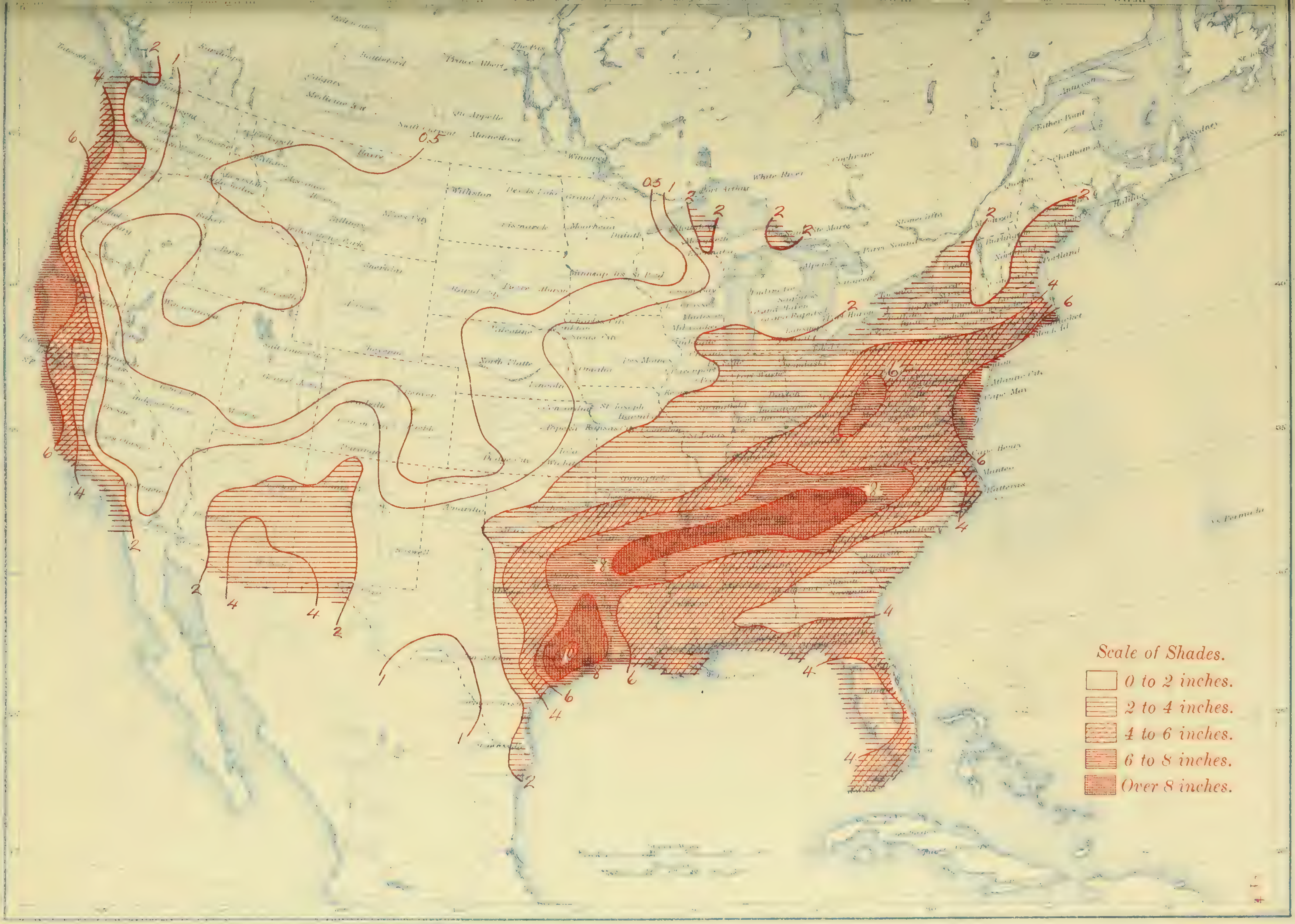
CLIMATOLOGICAL DATA

KENTUCKY SECTION

DECEMBER 1914

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JANUARY 20, 1915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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XIX. Louisville, Ky., December, 1914. No. 12

GENERAL SUMMARY.

The first week was unseasonably warm, but decidedly cold weather prevailed during the rest of the month. The 15th was the coldest December day since 1901, and the second coldest on record in the State for December.

Precipitation was generally above normal, but the excess was most marked over the upper Cumberland basin. There were but few days without precipitation in some part of the State. Snowfall was unusually heavy, especially over the mountain and south-central counties. The ice storm of the 20th caused considerable damage to telephone and telegraph wires and delays to trolley car traffic, while the slippery condition of the streets and sidewalks resulted in many serious accidents to pedestrians.

PRESSURE.

During the first decade shallow depressions and high areas of moderate energy controlled weather conditions over the State. A strong high pressure area developed about the 10th and during the rest of the month high areas were generally dominant. Two important disturbances moved from the Gulf region northeastward with their centers to the south of the State, causing the heavy snowfalls of the 13th and the 24-25th.

The mean sea-level pressure, as determined from the records of two stations, was 30.18 inches. The highest was 30.70 inches at Louisville on the 17th, and the lowest 29.62 inches at both Louisville and Lexington on the 29th.

TEMPERATURE.

The mean temperature for the State, as determined from the records of 36 stations, was 32.8°, which is 4.7° below the December normal. Temperatures were considerably above normal during the first week. The highest temperature in the State during the month was 70°, registered at Beaver Dam on the 1st. During the period 14-17th, minimum temperatures generally over the State ranged between 10° above and 16° below zero. On the 15th and 16th minimum temperatures were below zero at nearly all stations, the lowest being 16° on the 15th at Eubank and Farmers. The only lower record in the State for December is −22° in 1901. Temperatures were again zero or slightly below at several stations on the 26th.

HUMIDITY.

At Louisville the average relative humidity, 91 per cent. at 7 a. m., and 82 per cent. at 7 p. m., was the highest on record for December during the past 25 years.

PRECIPITATION.

The average precipitation for the State, computed from the records of 47 stations, was 5.22 inches, which is 1.43 inches in excess of the normal amount. From 6 to 9 inches occurred over the southern border counties east of the lower Cumberland and in a few of the south-central counties, and 3.5 to 6 inches over the rest of the State. The amounts at the various stations ranged between 3.53 inches at Maysville and 9.45 inches at Alpha. During the first two weeks rain or snow was of daily occurrence. The 24-hour amounts, however, were generally moderate except on the 4th-5th, when rains were generally quite heavy, and the 13th, when there was a very heavy fall of snow. Rain or snow was also of frequent occurrence during the latter part of the month, periods of general precipitation being 19th-21st, 24-25th and 29-30th. On the 24th there was another heavy fall of snow over the State.

Total snowfall was unusually large, 9 to 17 inches occurring over the eastern and south-central counties, and 5 to 8 inches over most of the other counties. There was practically no snow remaining on the ground, however, at the end of the month in any section.

WIND.

The total wind movement at Louisville was 7522 miles and at Lexington 7155 miles, the average hourly velocity being 10.2 and 9.6 miles, respectively. The maximum velocity for five minutes was at the rate of 38 miles per hour from the northeast on the 25th at Louisville, and 34 miles per hour from the west on the 13th at Lexington.

SUNSHINE AND CLOUDINESS.

Sunshine was only about one-half the normal amount at Louisville, and the lowest percentage on record for December during the past 13 years. The percentage for the month at Louisville was 23 and at Lexington 22. At Louisville there were 10 days in succession with no sunshine.

MISCELLANEOUS.

In the Ohio River, and its tributaries in this State, low water obtained during the first few days, but a moderate rise set in on the 5th and good stages prevailed during the rest of the month. From the 25th to the end of the month, there was considerable floating ice in the Ohio, impeding navigation for several days, especially in the reaches above Louisville.

ERRATA.—November, 1914: Maysville, precipitation departure should be −2.19 inches.

Year.	Temperature.				Precipitation.	
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.
1889	50.2	+12.7	76	13	1.57	−2.22
1890	37.8	+0.3	70	12	3.51	−0.28
1891	42.4	+4.9	70	15	4.10	+0.31
1892	34.6	−2.9	74	−3	4.22	+0.43
1893	39.0	+1.5	78	10	2.69	−1.10
1894	38.7	+1.2	76	−11	4.31	+0.52
1895	38.8	+1.3	77	6	4.43	+0.64
1896	39.6	+2.1	73	7	1.82	−1.97
1897	38.0	+0.5	72	3	3.75	−0.04
1898	34.1	−3.4	70	−12	2.74	−1.05
1899	34.8	−2.7	70	−15	4.26	+0.47
1900	38.6	+1.1	70	12	2.59	−1.20
1901	32.3	−5.2	72	−22	4.90	+1.11
1902	36.7	−0.8	72	3	7.36	+3.57
1903	30.7	−6.8	58	0	2.88	−0.91
1904	36.4	−1.1	72	−2	4.30	+0.51
1905	37.3	−0.2	66	11	4.38	+0.59
1906	39.0	+1.5	76	9	5.64	+1.85
1907	38.5	+1.0	70	8	3.20	−0.59
1908	39.8	+2.3	74	7	2.42	−1.37
1909	29.9	−7.6	79	−14	3.46	−0.33
1910	31.1	−6.4	66	3	3.37	−0.42
1911	41.6	+4.1	74	11	6.25	+2.46
1912	37.2	−0.3	73	5	3.98	+0.19
1913	39.5	+2.0	70	13	2.73	−1.06
1914	32.8	−4.7	70	16	5.22	+1.43

Climatological data for December, 1914.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	33.8	− 2.2	70	1	− 5	15	31	5.03	+ 1.31	1.05	6.0	11	5	10	16	W	W. T. Austin.
Blandville	Ballard	445	32	32.6	− 4.2	61	2	− 4	15	24	4.93	+ 0.98	1.50	6.3	11	5	3	23	N	E. W. Horr.
Calhoun	McLean	393	11	34.6	− 3.7	69	2	− 6	15	38	4.65	+ 0.79	0.95	5.1	13	3	9	19	NW	W. A. Taylor.
Earlington	Hopkins	370	24	32.6	− 6.6	69	1†	− 6	15	30	4.94	+ 1.08	1.15	4.0	10	8	1	22	N	Brick Southworth.
Hopkinsville	Christian	524	18	34.0	− 3.4	66	1†	− 6	15	28	5.95	+ 1.44	1.00	8.0	12	9	0	22	N	W. F. Randle.
Owensboro	Daviess	479	17	31.8	− 4.4	67	2	0	16	27	4.08	+ 0.40	0.70	5.5	11	4	4	23	NW	Henry S. Berry.
Paducah	McCracken	341	25	.....	.....	.....	.....	.....	.....	....	4.35	+ 0.51	1.10	4.0	9	....	....	....	......	F. L. Brown.
Central Section.																				
Alpha	Clinton	......	20	37.1	− 3.3	68	1	− 7	15	39	9.45	+ 4.71	1.45	17.0	12	6	2	23	N	W. W. Hicks.
Anchorage	Jefferson	700	13	30.1	− 2.7	62	1†	−14	15	36	4.09	+ 0.29	0.86	7.0	12	9	4	18	NW	C. E. Barret.
Bardstown	Nelson	637	17	32.6	− 3.7	67	1	− 6	15	32	5.42	+ 1.31	1.10	4.0	12	6	1	24	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	33.2	− 5.1	61	1	− 6	15	31	5.37	+ 1.20	1.10	8.0	15	9	7	15	W	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	.....	.....	.....	.....	.....	.....	....	6.83	+ 2.78	1.60	10.0	14	....	....	....	......	K. W. Massey.
Cloverport	Breckenridge	......	0	.....	.....	.....	.....	.....	.....	....	4.10	....	0.71	5.9	15	....	....	....	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	34.2	− 3.4	66	2	−10	15	36	7.07	+ 2.80	2.25	12.0	15	8	3	20	N	Miss Lee Ray.
Eubank	Pulaski	1177	20	32.7ᵃ	− 3.0	69	2	−16	15	46	5.75	+ 2.33	1.10	4.8	15	5	3	23	W	Mrs. Katie Payne.
Frankfort	Franklin	560	23	35.0	− 2.3	67	1	− 4	15	32	4.57	+ 1.21	1.14	4.7	17	5	4	22	N	Geo. L. Barnes
Franklin	Simpson	691	20	34.8	− 5.2	64	2	4	16	29	6.12	+ 1.84	1.48	9.8	10	3	9	19	NW	J. E. Newman.
Greensburg	Green	581	22	32.4ᵃ	− 3.6	65	1	− 7	15	34	6.76	+ 2.71	1.39	8.5	18	4	3	24	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	11	.....	.....	.....	.....	.....	.....	....	5.25	+ 0.86	1.47	6.0	19	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	......	16	33.2	− 2.6	65	2	− 6	15	30	4.56	+ 0.87	1.26	5.0	11	8	1	22	SW	W. J. Piggott.
Leitchfield	Grayson	635	18	33.0	− 2.8	64	1†	− 9	15	32	5.09	+ 0.47	1.03	6.5	11	7	6	18	NW	John E. Stone.
Lexington	Fayette	989	26	30.4	− 6.0	62	1	− 7	15	23	4.40	+ 1.08	0.87	10.7	16	3	6	22	W	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	33.3ᵇ	− 2.9	63	1	−10	15	31	4.19	+ 0.11	2.05	3.0	12	8	3	20	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	31.1	− 7.0	62	2	0	15	25	4.06	+ 0.33	0.77	5.7	14	3	7	21	N	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	......	4	32.0	....	63	2	− 2	16	28	4.31	....	0.86	7.0	11	6	5	20	NE	Wm. I. Hunt.
St. John	Hardin	777	18	30.3	− 3.9	64	2	−15	15	39	4.79	+ 0.75	1.10	6.5	10	5	3	23	......	Sisters of Loretto.
Scott	Kenton	......	16	30.1	− 2.7	60	1	− 7	15	32	3.62	+ 0.56	1.14	8.1	13	9	2	20	SW	E. B. Wilson.
Shelby City	Boyle	1087	20	33.0	− 2.3	62	1	−11	15	32	6.05	+ 1.82	1.44	7.0	14	6	5	20	W	H. F. Ewing.
Shelbyville	Shelby	759	25	28.5ᵃ	− 7.4	61	2	−11	15	33	5.35	+ 1.69	1.00	7.5	13	7	5	19	W	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	32.1	− 2.9	63	1	−10	15	41	4.60	+ 0.31	1.05	5.7	15	4	6	21	W	E. D. Bourne.
Williamstown	Grant	943	11	29.1	− 3.7	64	2	− 9	15	39	4.13	+ 0.73	1.12	4.0	16	5	5	21	......	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	33.4	− 1.2	61	1	− 7	15	36	5.10	+ 0.84	1.06	10.0	13	3	6	22	W	Miss Sabina E. Cann.
Berea	Madison	1070	13	33.6	− 2.3	64	4	−10	15	36	6.73	+ 2.75	1.25	12.7	17	8	7	16	NW	C. F. Rumold.
Catlettsburg	Boyd	534	25	.....	.....	.....	.....	.....	.....	....	5.20	+ 1.81	1.04	9.0	17	...	....	....	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	.....	.....	.....	.....	.....	.....	....	4.13	+ 1.02	1.25	3.5	12	5	5	21	......	J. V. Oldham.
Farmers	Rowan	668	8	32.2	− 3.3	60	1†	−16	15	42	5.55	+ 1.95	1.34	6.7	12	12	5	14	NW	Lee Craycraft.
Hazard	Perry	......	0	.....	.....	.....	.....	.....	.....	....	5.66	....	0.98	13.5	17	....	....	....	......	Kelly E. Watts.
Jackson	Breathitt	......	4	.....	.....	.....	.....	.....	.....	....	......	....	.....	....	...	....	....	....	......	....
London	Laurel	......	0	.....	.....	.....	.....	.....	.....	....	6.63	....	1.84	11.0	14	....	....	....	......	C. R. Lee.
Louisa	Lawrence	......	2	.....	.....	.....	.....	.....	.....	....	5.33	....	0.95	13.0	12	....	....	....	......	Lucien S. Johnson.
Manchester	Clay	......	3	.....	.....	.....	.....	.....	.....	....	5.10	....	0.97	17.0	15	....	....	....	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	30.3	− 3.6	61	1	− 9	15	38	3.53	+ 0.10	0.86	6.0	18	7	3	21	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	36.2	− 1.7	65	1	− 3	15	34	7.63	+ 3.48	1.54	9.0	12	8	8	15	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	30.7	− 4.7	61	1	− 8	15†	35	5.38	+ 1.43	0.97	12.5	20	8	5	18	N	H. Clay McKee.
Pikeville	Pike	......	6	.....	.....	.....	.....	.....	.....	....	4.62	....	1.00	9.0	16	....	....	....	......	I. M. Williams.
Richmond	Madison	926	22	33.4	− 3.9	64	4†	− 7	15	27	4.63	+ 0.97	0.80	5.1	16	4	0	27	......	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	0	36.0	......	67	6	1	15	32	5.55	....	1.40	11.0	11	9	1	21	S	O. A. Lund.
Williamsburg	Whitley	939	18	36.0ᵇ	− 1.4	68	1†	− 3	15	34	4.81	+ 1.12	1.00	6.4	14	8	2	21	S	N. C. Jones.
State averages and extremes		......	....	32.8	......	70	1	−16	15	46	5.22	....	2.25	7.7	14	6	4	21	W	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for December, 1914.

STATIONS.	Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Section.																																
Beaver Dam ‖ ... G.				1.05	.10	.06			.02		.05		.73						.97		.65			[illegible]	.26				.90			[illegible]
Blandville ... M		T.	.92	.68	.07	.07	.03		T.	T.			.60						.79	.33	.19		T.	.63	T.				[illegible]			[illegible]
Calhoun ... G.	T.		.15	.95	.24	.02	.09		.07	T.	.02		.60	T.					.92	.07	.49			.11					[illegible]			[illegible]
Earlington ‖ ... G.				1.15	.20	.07		T.	.02	T.		.60							.83	.85				[illegible]	[illegible]				[illegible]			[illegible]
Hopkinsville ... C			.76	.64	.10			.25		T.	.10		.75						.60	.10	.45			.35	.85				[illegible]			[illegible]
Marion ...																			.76	T.				.45					[illegible]			
Owensboro ‖ ... O.	T.			.58	.22		.17		.07	T.	.08	.45	.50						.50		.70				.34				.47			[illegible]
Paducah ‖ ... O.				1.10	T.	.08							.66	T.					.68	.10	.45			.10	.60				[illegible]			[illegible]
Central Section.																																
Alpha ... C.	.50		1.15	.55	T.	.25	T.	T.		T.	T.		.80	T.				.75	1.15	.40	T.			.75	.90			.80	1.45	T.		[illegible]
Anchorage ... O.			.21	.33	.45		.06	.08	.15	T.	T.		.39	T.					.86	.19	.51			.15					.71			[illegible]
Bardstown ‖ ... S.			.09	.97	.45	.13			.10	.09	T.		.40						1.10	.28	.84			T.					[illegible]	.10		[illegible]
Bowling Green ‖ ... G.		.02		1.10	.50		.05	T.		.10	.05		.10	.10					.16	.25	.82			.05	[illegible]				.82	.10		[illegible]
Burnside ‖ ... C.	.44			.78	.70	.03			T.	.10	T.	T.	.10	.30					.18	.60	.80	T.			.95	.10			1.60	[illegible]		[illegible]
Cloverport ‖ ... O.		T.		.71	.15	.05	.03	T.	.04	.07	.06	T.	.50	.16					.68	.16	.63			.20	.06				.60	T.		4.10
Edmonton ... G.			.08	2.25		.12	.10		.10	T.	.06		.60						.96	.11	.86	.03		.12	.84				.79	.05		[illegible]
Eubank ‖ ... C.	.32			.77	1.10	.18				.16	.05		.02	.40					.26	.54	.46			.05	.85				.45	.11		5.75
Frankfort ‖ ... K.	T.	.02		1.14	.39	.03	T.	.02	.02	.05	.03	T.	.25	.37					.52	.18	.85			.14	.03				.63	.02	T.	4.57
Franklin ... G.			1.48	.25		T.		T.	T.	T.	.20		.65	T.				T.	.65	.10	.60			.60	.83			T.	.76	T.		6.12
Greensburg ‡ ... G.	.04			1.39	1.03	.15	.15	.02	.01	.12	.10		.21	.26					.45	.18	.70			.18	.65				.75	.07		6.76
High Bridge ‡ ... K.	.01			1.47	.27	.06	.07	.01	.06	.12	.05	.03	.15	.40					.30	.49	.90			.09	.20				.54	.03		5.25
Irvington ... O.			.31	.65	.07	.02	T.	T.	T.	T.	.17		.47	T.					.86	.14	.56			.05				T.	1.26			4.56
Leitchfield ... G.			1.03	.30	.20				.15		.10		.50						.84	*	.64			.40					.93			5.09
Lexington *** ... K.	.22		.52	.37	.06		.04	.01	.12	.05	.04	T.	.70	.01				T.	.83	.40	.18			.35	T.				.50	T.		[illegible]
Loretto ... S.	.02	.02	.06		2.05	.03	T.	.01	.14				.30						.63		.29			.19					.45			4.19
Louisville*** ... O.		T.	.59	.18	.41	.05	T.	.04	.10	T.	.01		.42	T.				.05	.69	.47	.22			.22				T.	.61	T.	T.	4.06
Do. (Cherokee Park) ... O				.65		.44	T.	.10		.17	.08		.40						.86		.70			.23					.62	.06		4.31
St. John ‖ ... S.				.80	.39	.05	T.		T.	T.	.10		.40	.20					.80	.20	.75			T.	T.				1.10	T.		4.79
Scott ... L.	.02	T.		1.14	.05	.04	.04	.10	.03	T.	.05	T.	.26	T.				T.	.62	T.	.59			.17					.51	T.		3.62
Shelby City ... K.	.03	T.	T.	1.44	.97	.04	.10	T.	.10	.10			.40						.94	.03	.59			.52	.20				.59			6.05
Shelbyville ‖ ... S.				.93	.34	.02		.10	.18				.02	.45					.30	.35	1.00			.28					.98	.10		5.35
Taylorsville ... S.	T.		.07	1.05	.17	.01	T.	.01	.05	.05	.04		.40	.01		T.		T.	.92	.01	.72			.23					.86	T.	T.	4.60
Williamstown ‖ ... L.			1.12		.42	.03	.02	.03	.02	.05	.03	.01	.20						T.	.30	.15	.75	.12						.82	.06		4.13
Eastern Section.																																
Beattyville ‡ ... K.	.05	T.		.65	.32	T.	T.	T.	T.	.10	T.		.16	.50	T.				.18	.76	.62			T.	1.06	.06			.54	.10		5.10
Berea ... K.	.74		.05	.68	T.	.33	.03	.10	.15	.15	.30		.71						1.25	.06	.55			.70	.40				.51	.02		6.73
Catlettsburg ‖ ... B.	.04			1.04	.48	.44		.04	.04	.10	.04	.04	T.	.52					.24	.44	.78			.14	.20				.50	.12		5.20
Falmouth ‖ ... L.	.04			1.25			.10			.06	.03	T.		.20					.50	.20	.81			.15	T.				.72	.07	T.	4.13
Farmers ... L.			.12	.75				.20	.55		.02		.46	.01					1.34		.85		.10	.20					.95			5.55
Hazard ‖ ... K.	.05	T.		.98	.26		.04	.13	.04	.13	.05	T.	.10	.16					.15	.80	.20		T.		.95	.15			.90	.13		5.66
Jackson ‖ ... K.																																
London ‖ ... C.	.10	.02		.78	.38		.02	.10	T.	T.	T.	T.		1.20					.31	.28	.65	.10			1.84	.05			.60	.20		6.63
Louisa ‖ ... B.		.10		.95	.58	.20								.60					.15	.72	.70				.40	.30			.57	.06		5.33
Manchester ‖ ... K.	.45	.21		.17	.32	.09		.12					.10	.52	T.				.22	.93		.45			.97	.27			.21	.07		5.10
Maysville ‖ ... O.	.30	.06		.86	.31	.03	.03	.03	.04	.08	.06			.34					.16	.40	.30			.05	.03				.32	.13		3.53
Middlesboro ... C.	.02		.53	1.33	.70		.77				T.		.36						1.06	.38				.34	1.54				.55	.05		7.63
Mount Sterling ‖ ... L.	.10	.20	T.	.97	.21	.02	T.	.10	.08	.10	.05	.12	T.	.65					.32	.30	.65				.40	.04	.04	.40	.55	.08		5.38
Pikeville ‡ ... B.	.04	.06	.08	.84	.46	.06		.04	T.	.08	T.	T.	T.	.38	T.				.08	.50	.32			T.	1.00	.28			.24	.16		4.62
Richmond ‡ ... K.		T.	.01	.70	.35		.08	.02	.07	.13	.04	T.	.28	.27					.30	.80	.50			T.	.50				.55	.03		4.63
Weeksbury ... B.		.40	1.40	.20	.10		.10						.60						1.00	.30				.20	.90					.35		5.55
Williamsburg ‖ ... C.	.05			1.00	.48	T.				T.	T.		.50	.05					.14	.40	.43	.07		.02	.75	.25			.60	.07		4.81

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

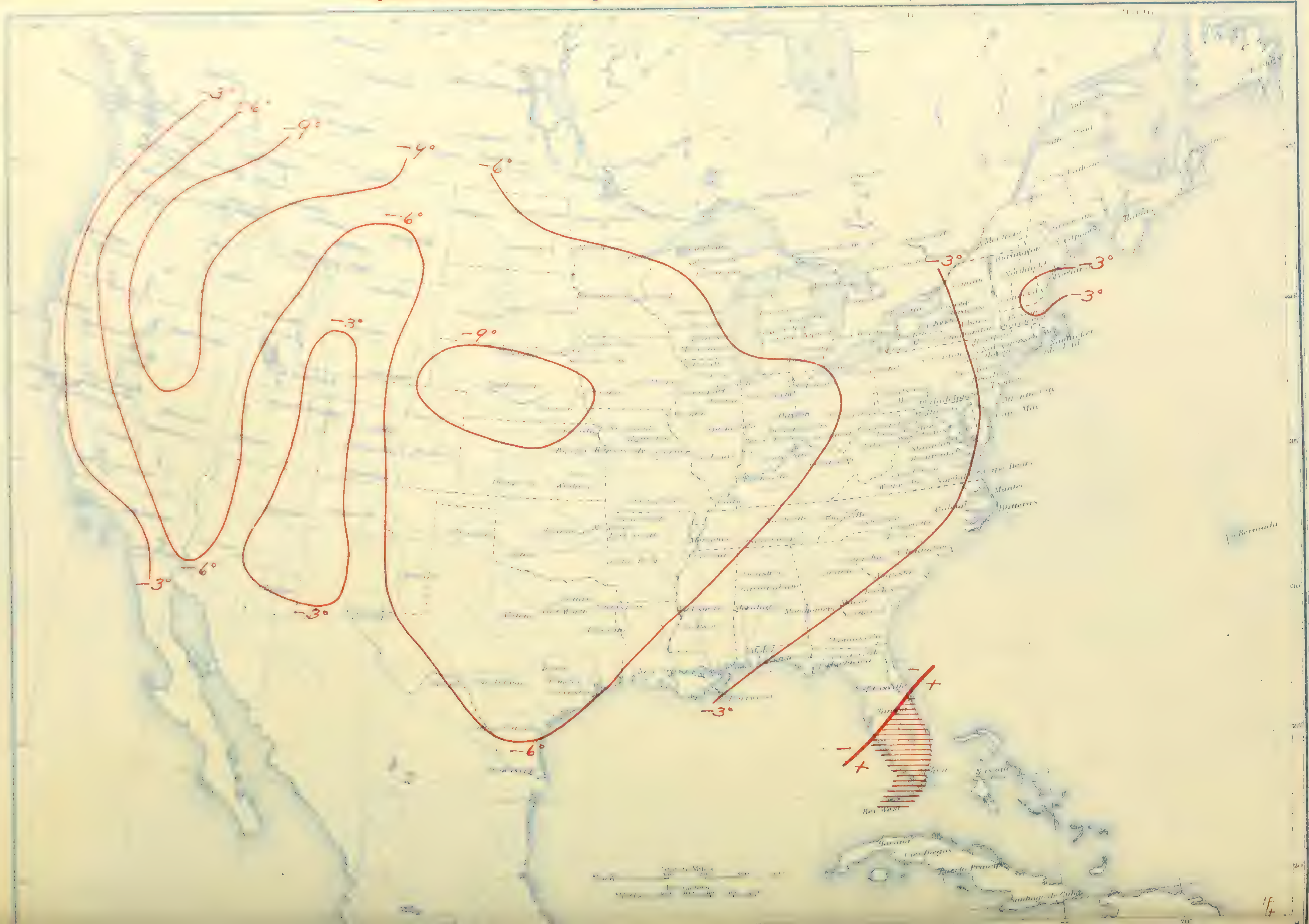
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for December, 1914.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	70	66	61	58	56	54	52	47	47	33	31	38	37	15	20	30	32	38	36	39	34	31	37	35	26	28	40	43	47	29	32	40.1
	Minimum	52	48	56	50	41	42	45	41	34	30	26	27	32	11	5	1	3	17	33	25	32	19	21	31	23	11	14	24	31	27	14	27.5
Blandville	Maximum	57	61	56	55	47	47	48	48	43	35	35	34	34	21	19	22	29	38	37	33	33	33	35	37	33	28	39	44	44	37	34	38.6
	Minimum	47	46	50	42	40	47	46	39	34	28	25	24	21	5	-4	6	7	24	29	25	23	21	23	33	20	8	15	30	36	20	16	26.6
Calhoun	Maximum	68	69	60	54	49	49	49	47	45	34	29	38	37	32	31	37	38	39	38	34	37	31	38	35	33	30	42	48	46	43	35	41.8
	Minimum	53	45	50	47	46	45	44	41	33	29	25	27	32	5	6	1	4	17	33	24	26	28	22	31	23	11	16	27	36	23	13	27.4
Earlington *	Maximum	69	69	56	49	48	46	50	45	38	33	30	33	35	14	21	30	31	40	37	37	31	32	40	36	27	31	42	45	46	30	35	38.9
	Minimum	54	44	47	47	45	47	42	43	36	29	24	26	24	10	-6	6	7	10	29	25	21	17	23	24	25	11	15	22	30	26	13	26.3
Hopkinsville	Maximum	66	66	62	55	47	49	51	49	44	47	30	39	46	33	17	25	30	41	37	30	37	32	36	36	35	26	38	40	45	42	30	40.7
	Minimum	57	45	44	46	42	44	42	43	35	29	25	24	31	8	-6	0	8	22	33	27	29	18	22	33	22	10	10	24	36	27	15	27.3
Owensboro *	Maximum	63	67	55	49	50	49	46	37	34	34	33	33	32	18	16	21	25	37	40	33	35	33	34	33	24	27	37	46	33	28	28	36.5
	Minimum	52	46	51	49	45	44	44	37	33	28	26	28	30	7	7	0	6	10	33	32	23	18	22	30	24	10	17	20	33	24	12	27.1
Central Section																																	
Alpha	Maximum	68	64	56	57	53	49	49	47	44	41	32	42	35	33	26	38	41	42	44	40	39	38	43	39	36	31	43	46	52	48	37	43.6
	Minimum	55	49	44	53	48	48	47	44	41	32	28	27	33	13	7	-1	10	26	38	35	34	21	25	36	22	10	25	20	48	30	16	30.6
Anchorage	Maximum	62	62	56	54	50	49	45	42	37	32	32	35	37	30	12	24	25	38	36	32	36	27	32	36	31	22	41	44	47	38	28	37.8
	Minimum	50	42	48	46	44	43	40	36	31	29	27	26	30	-6	14	8	-5	9	29	20	20	16	14	26	15	-2	6	16	36	16	14	22.4
Bardstown *	Maximum	67	61	56	53	58	60	47	45	37	31	32	37	35	11	19	26	28	40	38	41	35	30	39	34	24	28	40	45	49	33	33	39.1
	Minimum	50	50	51	50	48	45	43	41	33	29	26	26	27	11	-6	1	3	8	26	25	28	18	21	27	21	8	8	20	28	29	14	26.1
Bowling Green*	Maximum	61	54	59	56	48	60	50	47	45	41	40	42	35	21	18	28	31	35	40	45	35	32	38	38	26	35	41	42	48	42	35	40.9
	Minimum	45	45	47	48	43	42	45	40	35	28	22	22	25	9	-6	-3	5	20	23	23	31	25	20	23	21	5	10	17	34	27	12	25.5
Edmonton	Maximum	64	66	59	57	56	50	50	47	40	35	29	39	35	33	18	29	35	40	42	38	52	32	42	38	35	33	43	40	52	50	32	42.3
	Minimum	42	47	52	52	42	42	45	40	35	28	25	24	31	5	10	-5	3	15	35	29	28	18	21	30	28	4	7	17	35	27	14	26.0
Eubank*	Maximum	68	69	61	62	52	49	46	..	41	38	32	37	30	32	30	29	32	39	38	52	42	31	38	37	32	30	37	40	50	40	34	41.6[a]
	Minimum	52	44	52	57	50	45	41	40	..	29	28	25	27	10	-16	-13	-6	10	23	28	29	19	19	20	22	1	2	11	23	31	12	23.8[a]
Frankfort	Maximum	67	66	65	62	64	56	55	49	47	41	38	41	40	40	16	24	29	41	44	43	45	35	34	39	33	27	38	43	53	52	31	43.8
	Minimum	51	51	52	49	46	44	40	38	33	30	28	28	31	8	-4	4	1	10	33	22	26	18	21	27	19	5	11	18	35	23	14	26.2
Franklin	Maximum	60	64	59	56	50	50	52	49	47	36	30	39	38	34	20	30	30	39	39	39	47	32	38	38	35	23	43	41	50	42	31	41.3
	Minimum	52	47	52	48	44	45	45	42	33	27	25	27	32	5	10	4	10	22	32	29	26	21	23	32	21	6	14	26	38	26	15	28.4
Greensburg*	Maximum	65	60	53	50	..	..	48	47	41	34	30	39	36	20	19	31	31	41	37	50	36	31	39	37	25	25	40	48	52	33	32	39.0[b]
	Minimum	49	43	50	50	48	48	48	44	40	30	22	27	28	10	-7	-3	2	9	25	29	30	20	21	25	22	3	7	15	18	32	13	25.8
Irvington	Maximum	63	65	60	52	49	47	17	44	40	35	35	37	38	30	16	25	25	39	38	34	39	30	36	35	32	28	40	49	48	42	30	39.6
	Minimum	52	47	52	47	45	45	41	40	30	32	27	28	30	5	-6	-1	4	16	34	23	25	20	23	32	17	10	19	25	40	20	11	26.9
Leitchfield	Maximum	64	64	58	53	51	48	48	46	44	34	28	37	38	30	18	28	37	39	38	34	41	31	36	34	32	27	40	43	48	37	30	39.9
	Minimum	52	46	52	50	46	45	42	42	32	28	25	25	30	6	9	-2	5	14	30	25	22	18	21	31	18	10	16	23	37	20	12	26.2
Lexington	Maximum	62	57	55	57	49	46	42	40	37	30	30	33	32	20	13	28	24	36	38	37	43	27	32	34	30	18	35	38	49	35	26	36.4
	Minimum	51	49	49	48	44	42	38	36	30	27	26	26	20	-2	-7	3	8	16	29	22	20	17	21	28	7	2	13	26	35	17	13	24.3
Loretto	Maximum	63	60	57	58	53	49	48	44	42	..	..	37	35	33	16	26	29	39	40	35	45	30	37	34	33	27	39	41	50	45	31	40.6[b]
	Minimum	49	47	50	49	49	46	42	41	33	..	..	26	30	6	-10	-4	0	8	34	24	25	13	23	29	20	8	20	23	38	24	12	26.0[b]
Louisville	Maximum	62	62	57	51	50	48	44	42	35	31	32	36	36	15	14	24	24	39	37	34	38	28	33	36	29	22	38	43	46	34	28	37.0
	Minimum	53	51	48	46	45	43	40	34	31	29	28	27	15	2	0	6	9	20	25	20	19	18	22	29	11	7	13	28	34	14	13	25.2
Do. (Cherokee Park)	Maximum	62	63	57	55	50	49	48	43	40	34	33	36	35	34	13	23	23	37	37	35	38	28	31	35	35	20	37	41	46	43	26	38.3
	Minimum	51	49	49	45	44	44	40	38	31	29	28	27	31	6	3	-2	2	13	33	20	25	18	21	26	18	2	9	21	36	22	14	25.6
St. John *	Maximum	62	64	55	52	48	47	46	44	37	30	30	35	32	20	18	25	25	38	36	40	33	30	37	34	23	25	39	42	47	32	31	37.3
	Minimum	50	45	47	49	46	45	41	41	32	28	25	21	25	4	-15	-14	6	8	24	23	22	18	20	21	22	9	9	18	25	28	11	23.3
Scott	Maximum	60	58	53	49	48	44	42	40	35	33	33	32	33	31	14	21	29	37	37	32	36	27	31	33	32	28	37	40	45	41	27	36.7
	Minimum	52	57	47	42	40	40	37	34	31	26	26	25	29	3	-7	-1	-3	10	32	17	24	15	18	21	15	0	19	17	32	20	12	23.5
Shelby City	Maximum	62	61	56	59	57	51	47	43	41	35	30	36	36	34	15	25	26	40	38	35	49	31	37	34	35	22	37	39	51	50	29	40.0
	Minimum	53	50	42	51	48	45	42	39	33	28	27	26	30	8	-11	-6	1	8	33	27	29	19	21	28	19	5	10	25	35	27	15	26.0
Shelbyville *	Maximum	60	61	56	50	44	..	55	40	36	29	39	33	31	11	14	18	24	37	38	35	33	28	30	34	17	20	36	41	43	26	27	34.9[a]
	Minimum	51	50	50	45	44	42	..	37	32	28	33	29	28	5	-11	-8	5	4	42	10	20	17	18	20	17	-1	6	17	25	26	13	22.1[a]
Taylorsville	Maximum	63	61	57	55	52	50	46	42	39	33	33	36	34	31	14	23	25	39	36	34	40	29	34	35	34	24	37	42	48	43	27	38.6
	Minimum	50	50	50	48	46	45	41	39	33	30	27	27	31	6	-10	-5	2	8	33	23	27	18	19	28	18	5	13	19	37	24	16	25.6
Williamstown *	Maximum	60	64	55	50	44	42	41	41	30	30	33	30	30	17	17	25	29	37	35	37	37	29	31	41	24	24	39	42	38	44	43	36.7
	Minimum	51	51	50	44	42	39	37	35	30	26	26	25	25	5	-9	7	0	2	18	17	20	15	16	20	16	0	0	17	22	17	15	21.5
Eastern Section.																																	
Beattyville *	Maximum	61	56	56	60	54	50	46	45	47	43	32	39	34	19	23	32	33	38	39	50	41	32	43	31	30	22	31	39	53	35	37	40.4
	Minimum	49	47	50	51	47	46	43	41	40	31	29	29	27	14	7	11	14	2	16	32	32	20	18	20	30	6	4	8	19	34	14	26.4
Berea	Maximum	63	61	55	64	55	52	55	50	40	33	30	39	34	31	15	30	26	40	40	37	50	29	37	35	33	26	37	43	52	49	39	41.3
	Minimum	48	48	52	51	48	46	41	40	32	28	29	27	29	5	10	-6	2	6	33	28	25	19	21	28	18	2	13	23	37	27	14	25.8
Farmers	Maximum	60	60	52	51	53	48	47	65	40	35	30	33	36	36	18	29	35	40	40	35	43	33	35	36	35	23	38	42	54	53	22	40.5
	Minimum	50	52	48	49	48	40	38	12	40	31	30	28	28	11	-16	12	7	4	34	25	29	20	20	18	20	7	0	12	33	22	12	23.9
Maysville*	Maximum	61	60	58	54	46	48	44	40	38	32	33	34	34	17	18	27	28	38	37	41	38	31	31	36	23	27	41	44	50	34	29	37.8
	Minimum	50	53	50	49	44	41	39	38	35	30	29	27	27	7	9	8	5	5	6	21	24	17	17	23	17	2	3	10	17	31	17	22.8
Middlesboro	Maximum	65	62	58	62	57	53	50	49	48	42	32	40	38	36	20	32	35	37	38	44	52	35	42	38	36	32	39	41	53	52	37	43.7
	Minimum	48	47	44	52	48	45	44	42	39	31	27	29	30	14	-3	-2	3	13	33	33	35	22	16	29	28	17	19	20	35	33	23	28.8
Mount Sterling*	Maximum	61	58	54	58	50	48	43	41	40	33	32	31	35	9	12	24	24	39	37	45	38	29	33	36	22	28	37	39	51	32	22	36.8
	Minimum	50	50	51	50	46	44	40	39	36	29	29	29	29	9	8	-8	4	9	21	25	30	18	21	22	19	2	2	17	18	32	15	24.6
Richmond *	Maximum	63	58	56	64	64	49	44	41	41	30	30	38	33	16	16	26	26	40	40	48	35	28	36	34	22	28	36	45	50	32	32	38.7
	Minimum	50	50	52	51	48	45	42	39	38	29	27	27	28	10	-7	1	7	17	36	27	33	19	20	30	19	6	22	25	39	28	14	28.1
Weeksbury	Maximum	64	60	59	53	57	67	57	47	46	44	32	36	38	35	17	34	32	39	41	56	45	35	39	40	39	25	35	39	55	53	36	43.7
	Minimum	40	50	51	45	44	47	40	42	42	30	30	27	28	13	1	5	10	16	33	37	32	24	24	28	20	14	3	12	32	32	24	28.4
Williamsburg*	Maximum	68	64	..	..	66	62	..	..	50	47	40	42	38	19	19	32	35	43	48	54	53	32	45	43	42	43	40	44	54	35	32	44.1[d]
	Minimum	52	46	45	50	51	50	60	44	40	32	22	28	30	13	3	2	1	10	23	34	34	22	20	20	28	14	12	12	20	34	19	27.8

*Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

Departure of the Mean Temperature from the Normal, December, 1914.



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WEATHER BUREAU
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CLIMATOLOGICAL DATA

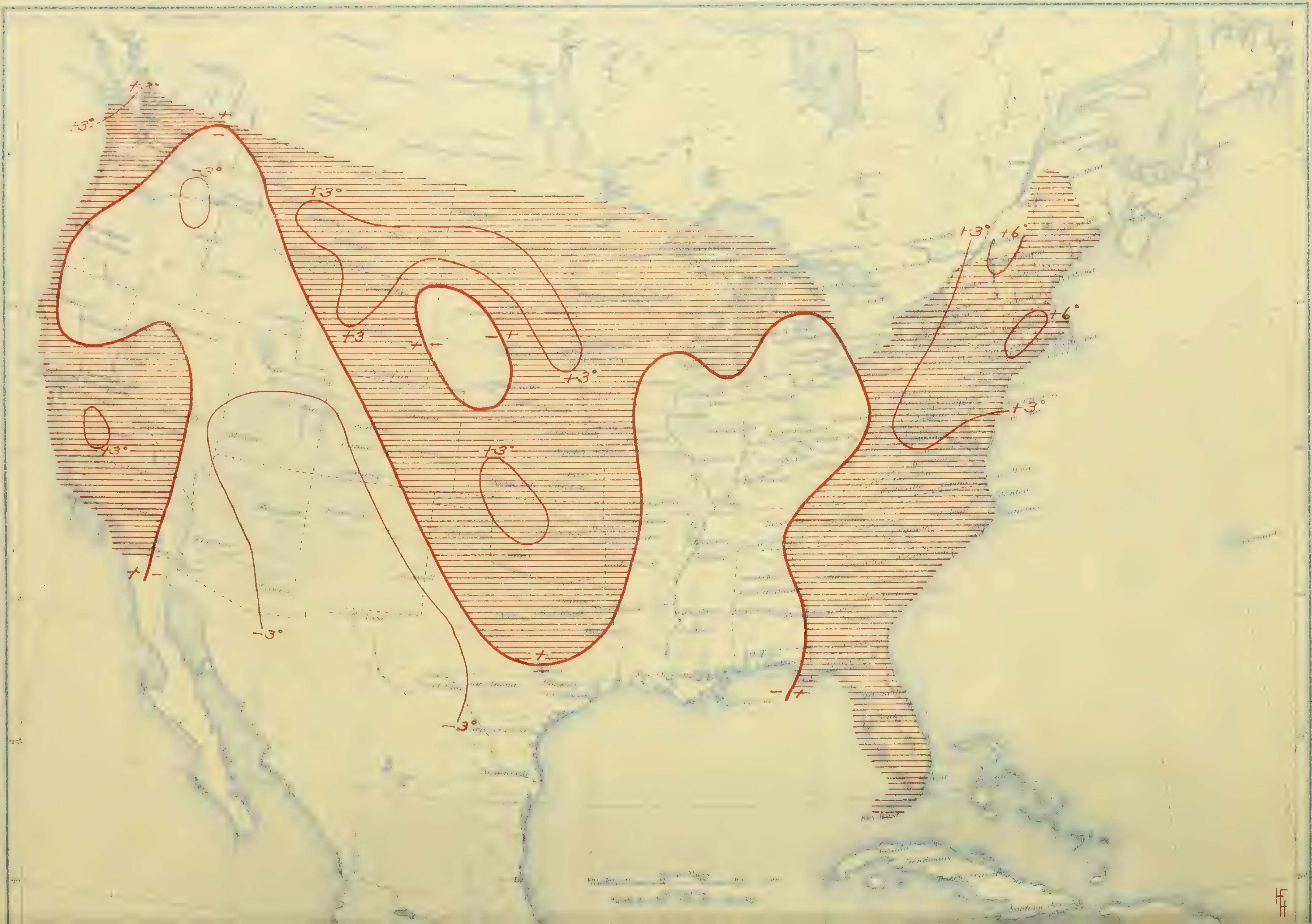
KENTUCKY SECTION

JANUARY 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 24, 1915

Departure of the Mean Temperature from the Normal, January, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., January, 1915. No. 1

GENERAL SUMMARY.

Moderate temperature, generally above normal, prevailed during the first 17 days. A change to colder occurred on the 18th and, except for the 31st, unseasonably cold weather was the rule during the rest of the month. While the temperature averaged considerably below normal, largely on account of the low maxima, there were only a few days when severe temperature conditions obtained.

Precipitation averaged somewhat above normal, and was heaviest over the southern border counties and lightest over the northeastern counties. Snowfall was unusually heavy. In nearly all parts of the State the ground was covered with snow from the 18th to 30th, inclusive. There was very little snow during the first half of the month, but in the period 18th-25th snow occurred nearly every day; also there was considerable sleet on the 22d, 23d and 24th. The snow and sleet became packed into ice on streets and sidewalks and occasioned numerous accidents, which were most frequent on the 23d and 24th. The snow and ice covering practically disappeared with the warm rains and high temperature of the 31st.

PRESSURE.

Well-developed low pressure areas moving from the southwest or from the Gulf region toward the northeast were frequent during the first three weeks. From the 23d to 30th strong high pressure areas from the northwest controlled the weather situation; but on the 31st this condition gave way to the most important pressure feature of the month, the vast disturbance that moved in over the plateau section and caused the heavy rains at the end of the month.

TEMPERATURE.

As obtained from the records of 37 stations, the mean temperature for the State was 33.0°, which is 2.4° below normal for January. Maximum temperatures of 60° and over occurred generally on the 16th, 17th and 31st, the highest being 65° at Bowling Green on the 17th and at Middlesboro and Weeksbury on the 31st. Maximum temperatures were not unusually high nor minimum temperatures unseasonably low, the extremes being well within the limits of former years. The coldest days occurred in the period 24th-29th, when minimum temperatures registered generally between zero and 15°, the lowest for the State being zero at Anchorage and Taylorsville on the 26th.

HUMIDITY.

At Louisville the average relative humidity, at 7 a. m. was 90 per cent. and at 7 p. m. 82 per cent., which is the highest on record for January during the past 26 years.

PRECIPITATION.

Average precipitation for the State, as determined from the records of 48 stations, was 5.02 inches, which is 0.80 inch above the normal amount for January. Between 3 and 4 inches occurred over the northeastern counties, between 6 and 7 inches along the southern border and from 4 to 6 inches over the rest of the State. The monthly amounts at the various stations ranged between 3.50 inches at Williamstown and 6.74 inches at Alpha. Moderate showers occurred on the 6th and 7th, also rain was of daily occurrence during the period 11th-17th and snow during the period 18th-25th. Rain or snow in moderate amount occurred generally in the central and western counties on the 30th, and heavy rains over the same sections on the 31st with excessive 24-hour amounts at several stations. Snowfall ranged generally between 4 and 14 inches, being lightest over the southern counties and heaviest over the central and eastern counties. The average for the State was 7.0 inches.

WIND.

Total wind movement at Louisville was 8238 miles and at Lexington 7597 miles, the average hourly velocity being 11.1 and 10.2 miles, respectively. The maximum velocity for five minutes was at the rate of 36 miles per hour from the southwest on the 1st at Louisville and 36 miles per hour from the southeast on the 22d at Lexington.

SUNSHINE AND CLOUDINESS.

Sunshine at Louisville was 50 per cent and at Lexington 33 per cent of the possible amount. This is somewhat above the average for January at Louisville.

MISCELLANEOUS.

The heavy rains of the 30th-31st caused floods in some of the smaller streams of the western part of the State, resulting in considerable damage to lowland crops, fences and in soil erosion.

Good stages prevailed in the streams of the State, including the Ohio, throughout the month. There was considerable floating ice in the Madison-Louisville reach on the 1st and in the Catlettsburg-Portsmouth reach on the 3d, 11th and 30th.

Comparative Data for January

Year.	Temperature. Monthly average.	Temperature. Departure from 25-year normal.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Monthly average.	Precipitation. Departure from 25-year normal.
1889	38.0	+2.6	65	13	3.52	−0.70
1890	44.0	+8.6	77	10	6.43	+2.21
1891	37.0	+1.6	68	14	5.40	+1.18
1892	29.0	−6.4	65	− 6	2.72	−1.50
1893	26.0	−9.4	67	−22	2.08	−2.14
1894	38.0	+2.6	78	−12	2.91	−1.31
1895	30.0	−5.4	78	−16	5.71	+1.49
1896	36.1	+0.7	74	− 3	1.25	−2.97
1897	32.0	−3.4	75	−16	3.25	−0.97
1898	40.4	+5.0	72	6	8.76	+4.54
1899	34.4	−1.0	68	−18	6.23	+2.01
1900	37.2	+1.8	77	− 8	2.80	−1.42
1901	36.7	+1.3	75	4	1.85	−2.37
1902	33.7	−1.7	70	5	5.14	+0.92
1903	34.8	−0.6	82	− 9	2.50	−1.72
1904	32.3	−3.1	70	− 9	3.17	−1.05
1905	27.5	−7.9	70	−15	2.83	−1.39
1906	39.7	+4.3	80	− 9	3.48	−0.74
1907	43.2	+7.8	83	−11	8.02	+3.80
1908	35.0	−0.4	62	7	2.20	−2.02
1909	38.3	+2.9	77	− 8	3.47	−0.75
1910	33.8	−1.6	70	−20	4.41	+0.19
1911	39.7	+4.3	73	−16	2.88	−1.34
1912	25.9	−9.5	61	−20	3.09	−1.13
1913	42.5	+7.1	76	13	11.41	+7.19
1914	39.4	+4.0	79	5	2.31	−1.91
1915	33.0	−2.4	65	0	5.02	+0.80

Climatological data for January, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	32.8	− 2.0	59	16	8	21†	31	4.62	+0.18	1.95	7.0	9	4^{b}	11^{b}	14^{h}	S	W. T. Austin.
Blandville	Ballard	445	33	34.2	+ 0.8	58	15	9	19†	24	6.28	+1.87	2.03	5.1	8	8	9	14	N	E. W. Horr.
Calhoun	McLean	393	11	33.4	− 3.5	59	16	5	24	31	5.83	+0.93	2.47	8.4	12	7	7	17	N	W. A. Taylor.
Earlington	Hopkins	370	24	31.0	− 4.6	60	16	6	24	38	6.08	+1.95	2.78	11.0	12	10	3	18	S	Brick Southworth.
Hopkinsville	Christian	524	18	34.8	− 3.1	58	31	9	24	34	6.24	+1.80	4.10	5.0	7	9	1	21	W	W. F. Randle.
Marion	Crittenden	571	17	32.8	− 3.2	56	16†	5	24	27	6.14	+1.34	3.05	7.0	8	7	11	13	NW	B. C. Paris.
Owensboro	Daviess	479	17	32.2	− 3.5	63	31	5	24	31	4.49	+0.50	1.77	6.5	10	8	9	14	NW	Henry S. Berry.
Paducah	McCracken	341	26	....	....	....	....	....	....	....	4.49	+0.23	1.50	5.0	10	....	....	....	....	F. L. Brown.
Central Section.																				
Alpha	Clinton	....	21	37.5	− 2.8	64	17	15	29	30	6.74	+1.89	1.54	5.0	10	10	3	18	W	W. W. Hicks.
Anchorage	Jefferson	700	13	30.4	− 3.2	58	16	0	26	36	4.65	+0.99	1.48	7.0	11	10	7	14	NW	C. E. Barret.
Bardstown	Nelson	637	17	32.6	− 3.2	61	16†	3	29	33	5.07	+0.80	1.73	10.5	14	12	2	17	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	32.3	− 4.7	65	17	9	29	40	5.75	+1.24	1.68	5.7	14	10	12	9	W	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	....	....	....	....	....	....	....	5.49	+1.74	1.44	3.9	16	....	....	....	....	K. W. Massey.
Cloverport	Breckenridge	....	1	....	....	....	....	....	....	....	4.44	....	1.46	10.6	14	....	....	....	....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	34.4	+ 1.5	62	31	8	29	30	5.65	+1.60	1.07	6.2	14	6	10	15	....	Miss Lee Ray.
Eubank	Pulaski	1177	20	^{a}32.6	− 2.3	61	16†	8	29	32	5.04	+1.07	1.25	7.0	12	7	1	23	E	Mrs. Katie Payne.
Frankfort	Franklin	560	23	34.2	− 2.0	63	16†	3	29	34	4.13	+0.51	1.40	6.0	14	8	5	18	S	Geo. L. Barnes
Franklin	Simpson	691	20	34.6	− 3.0	60	31	12	24	23	6.35	+2.75	1.48	4.0	11	3	15	13	NW	J. E. Newman.
Greensburg	Green	581	22	32.6	− 1.6	64	31	9	29	35	5.69	+1.66	1.20	8.6	18	....	....	....	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	....	....	....	....	....	....	....	4.65	+1.33	0.90	9.5	16	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	....	17	33.0	− 2.4	59	16	4	29	32	4.61	+0.92	1.38	7.2	11	7	6	18	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	32.8	− 2.3	60	31	7	29	31	5.24	+0.72	2.10	7.0	10	6	15	10	NW	John E. Stone.
Lexington	Fayette	989	30	32.0	− 1.0	59	16	8	24	27	4.38	+0.55	0.98	7.3	16	5	11	15	W	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	^{b}32.6	− 3.6	61	31	1	26†	32	3.66	−0.43	0.82	6.5	14	11	3	17	....	Loretto Academy.
LOUISVILLE	Jefferson	525	42	31.9	− 2.4	58	16	4	24	28	4.98	+1.08	1.94	7.0	13	4	7	20	SE	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	....	5	31.7	....	57	16	4	29	27	4.78	....	1.98	4.7	13	9	9	13	S	Wm. I. Hunt.
St. John	Hardin	777	18	30.0	− 4.2	59	16	4	29	32	4.09	−0.19	1.25	7.2	10	8	4	19	....	Sisters of Loretto.
Scott	Kenton	....	17	29.4	− 2.7	58	16	1	24	29	3.80	+0.32	0.70	13.4	14	5	13	13	S	E. B. Wilson.
Shelby City	Boyle	1087	20	33.2	− 1.4	59	16†	10	29	26	5.12	+0.70	0.82	2.0	13	9	8	14	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	29.4	− 4.3	60	16	3	26†	28	5.12	+1.15	1.95	9.8	13	13	2	16	SE	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	32.2	− 1.6	59	16	0	26	34	5.29	+1.62	1.49	11.4	15	7	6	18	SW	E. D. Bourne.
Williamstown	Grant	943	12	30.0	− 1.6	59	16	2	24	37	3.50	+0.41	0.91	12.2	14	8	8	15	....	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	32.4	− 2.1	64	16	7	29	41	5.45	+1.44	1.28	3.5	17	7	13	11	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	34.1	− 2.9	63	31	11	26	36	4.84	+1.00	1.32	8.9	13	10	7	14	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26	....	....	....	....	....	....	....	4.52	+0.62	0.88	2.0	13	....	....	....	....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	....	....	....	....	....	....	....	3.94	+0.67	1.08	5.5	14	5	9	17	S	J. V. Oldham.
Farmers	Rowan	668	8	34.3	− 1.0	64	16	5	29	43	3.57	−0.23	1.55	1.8	12	13	7	11	....	Lee Craycraft.
Hazard	Perry	....	1	....	....	....	....	....	....	....	5.23	....	1.20	9.0	14	....	....	....	....	Kelly E. Watts.
Jackson	Breathitt	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
London	Laurel	....	0	....	....	....	....	....	....	....	6.07	....	1.40	4.0	15	....	....	....	....	C. R. Lee.
Louisa	Lawrence	....	·2	....	....	....	....	....	....	....	4.34	....	1.30	....	9	....	....	....	....	G. M. Guerin.
Manchester	Clay	....	3	....	....	....	....	....	....	....	5.58	....	1.20	6.5	14	....	....	....	....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	30.7	− 1.6	64	16	5	29	35	3.58	−0.37	0.92	9.5	14	9	7	15	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	37.4	+ 0.3	65	31	16	21	32	6.68	+2.68	1.32	4.0	14	12	7	12	....	B. H. Perkins.
Mount Sterling	Montgomery	930	24	35.3	+ 1.5	56	31	12	24†	32	4.66	+0.28	1.05	14.7	15	11	3	17	SW	H. Clay McKee.
Pikeville	Pike	....	6	....	....	....	....	....	....	....	4.44	....	1.52	....	13	....	....	....	....	I. M. Williams.
Richmond	Madison	926	22	33.8	+ 0.1	62	16	12	24†	26	5.63	+1.56	1.04	5.1	16	11	0	20	....	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	36.2	....	65	31	15	22†	33	4.52	....	1.12	14.0	9	7	3	21	S	O. A. Lund.
Williamsburg	Whitley	939	18	35.6	− 2.3	64	31	17	2†	33	5.46	+1.43	1.21	4.0	15	9	7	15	W	N. C. Jones.
State averages and extremes				33.0	− 2.4	65	17†	0	26	43	5.02	+0.80	4.10	7.0	13	8	7	16	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for January, 1915.

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Section.																																
Beaver Dam ‖ .... G						.32					.35			.15		.17			.39	T		T.	.76		.18					[illegible]	[illegible]	[illegible]
Blandville .... M	T					1.19					.11			T		.30		.40	.12			.87								[illegible]	[illegible]	[illegible]
Calhoun .... G		T				.90	.03				.21			.04		.15	T	.54	.01	.02		.65			.01					[illegible]	[illegible]	[illegible]
Earlington ‖ .... G						.82	.23				T	.21			T		.18	.15	.50	.05		.28	.46			.10				[illegible]	[illegible]	[illegible]
Hopkinsville C						.17					.30					.11		.30				1.50			.10					....	4.10	6.21
Marion						.80					.15			T.		.19		.60	.10			.14							....	1.11	3.05	6.14
Owensboro ‖ .... O						.55	.04				.22	T		.08			.07	T	.33		.55				T			[illegible]	.20	[illegible]	[illegible]	[illegible]
Paducah ‖ .... O						.72	.40				.14				.10		.20		.40			.15	.68						....	.20	1.50	4.49
Central Section.																																
Alpha C					.50	.40					1.54	T.		.25			.65	T	T.	.30	.20	.55	T	T	T					1.10	1.25	6.74
Anchorage .... O			T.			.40					.30	.05		.15	T	.19		.30	T.	.10		.72		T	.48					[illegible]	[illegible]	[illegible]
Bardstown ‖ .... S						.62	.15				.19	.56	.05		.07		.20	.10		.20		.30	.50		.25					.15	1.73	5.07
Bowling Green .... G						.17	.15				.03	.88			.08		.15	.33	.10	.25		.15	.75		.60					.43	1.68	5.75
Burnside ‖ C				T.		.43	.28				.03	1.44	.04		.20		.37	.84	.10	.20	.08	.12	.12	.08	.04	T				T.	.44	5.49
Cloverport ‖ .... O		T.				.80	.06				.05	.04			.02	T	.07	.18	.45	.11	T	.18	.76		.13					.13	1.46	4.44
Edmonton .... G						.60	.02				1.07	.11		.20	.02	.03	.25	.70	.40	T	T	.15	.42		.50			T			1.00	5.65
Eubank ‖ C						.40	.28					1.25					.30	.75		.11	.03	.19	.57	.11	.15						.60	5.04
Frankfort ‖ .... K				T.		.18	.31				.09	.60	T				.07	.27	.11	.04	.03	.08	.52	T	.16	T.				.03	1.40	4.13
Franklin .... G						.50					1.00	T.		.30		.20		.62	.15			.55	.60	.11						.54	1.48	6.35
Greensburg ‖ .... G						.39	.17				.11	.94			.50		.12	.47	.06	.15		.15	.86	.06	.38	.16	.05	.02	.02	...	1.20	5.69
High Bridge ‖ .... K						.22	.26				.04	.84			.05		.06	.49	.08	.30	.05	.20	.51	.15	.15	T				.05	.90	4.65
Irvington .... O			T.			.47					.32			T.		.23		.55	.15	.05		.51	.20	T	.27				T.	.48	1.38	4.61
Leitchfield .... G						.44					.52					.39		.40		.10		.54	.05		.20						*2.60	5.24
Lexington *** .... K			T.			.50					.59	.02		.03	T.	.04	.11	.35	.07	.28	.01	.42	.15	.20	.20			T.		.43	.98	4.38
Loretto .... S						.51	.05	.02			.70	.19	T.	.09		.11		.22		.25		.30	.10		.15					.15	.82	3.66
Louisville*** .... O	T.		T.			.49					.18	T.		.09	.02	.19		.50	T.	.03		.82	.01	.24	.02			T	T	.80	1.59	4.98
Do (Cherokee Park) .... O	T.		T.			.48	.04				.26	.04		.10	.02	.22		.11	.37	.05			.84		.27			T		...	1.98	4.78
St. John .... S			T.		.20							.40			T.		.20	.25		.45	T.	.24	.75		.25			T		.10	1.25	4.09
Scott L						.60	T.				.27	.15		T.		.05	.13	.33	.10	.01	.02	.55	.29		.30			T	T	.30	.70	3.80
Shelby City .... K						.62	.06				.82	.30		.32	.05		.11	.26		.20		.40	.44							.74	.80	5.12
Shelbyville ‖ .... S						.53	.25					.47			T.		.24	.30	.08	.02	T	.05	.70	.04	.44					.05	1.95	5.12
Taylorsville .... S				T.		.73	.04				.58	.07		T.		.27	.01	.41	.01	.22	.03	.44	.03	T	.56			T		.40	1.49	5.29
Williamstown ‖ L				T.		.11	.35				.03	.46	T.		.03		.10	.21	.21	.05		T.	.50	.01	.53					.01	.91	3.50
Eastern Section.																																
Beattyville ‖ .... K						.49	.37				T.	1.28	.05		.14		.27	1.00	.12	.05	.02	.10	.47	.12	.48	T		.04		.01	.44	5.45
Berea .... K			T.			.36					1.32	.10				T.	T.	1.10	.02	.31	.03	.51	.05	.06	.32					.02	.64	4.84
Catlettsburg ‖ .... B						.18	.40					.88	.18		.16		T.	.52	.04	.10	T		.50	.16	.70	T.		.04			.66	4.52
Falmouth ‖ L				T.		.29	.27				.05	.55	.01		.04		.11	.22	.22	.07	T.	.03	.57	T.	.43	T.		T	T.	T	1.08	3.94
Farmers L						1.55	.05				.05	.05		.07	.12			.85	T.	T.	.09	.15	.39		.01					.19	...	3.57
Hazard ‖ .... K						.12	.34					1.20	.20		.12			.90	.02	T.	.31	.61	.15	.12	.72			.12			.30	5.23
Jackson ‖ .... K																																
London ‖ C						.40	.64					1.40			.20		.20	1.34	.09	.30	.10	.06	.32	.17	.43	.02					.40	6.07
Louisa ‖ .... B						.32	.40					1.30			.10			.08	.72				.44		.22						.76	4.34
Manchester ‖ .... K					.98	.37	.18				T.	1.20	.04		.15			1.12	.02		.43		.21	.31	.33			.03			.21	5.58
Maysville ‖ .... O				T.		.02	.88					.61	T.		.08		.08	.31	.07	.06	.03		.14	.03	.30	.05		T.		T.	.92	3.58
Middlesboro C						1.04	.03				.90	.60		.08			.05	1.32	.05	.40			.62	.34	.85					.02	.38	6.68
Mount Sterling ‖ L						.15	.63					1.02	.03				.28	.56	.10	.10	.10	.07	.10	.04	.40					.03	1.05	4.66
Pikeville ‖ .... B						.16	.24					1.52	.36		.12			.74	.16	T.	.08	T.	.08	.32	.46	T.		.04	T	....	.16	4.44
Richmond ‖ .... K						.10	.55				.15	1.04	T.		.35		.10	.61	.15	.17	.10	.12	.50	.12	.47	T.				.12	.98	5.63
Weeksbury .... B						.35			1.12			.95						.75	.10	.20			.60					.05			.40	4.52
Williamsburg ‖ C						.52	.34				.02	1.21	.08		.21		.30	1.10	.15	.11	.05	T.	.24	.50	.38						.25	5.46

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

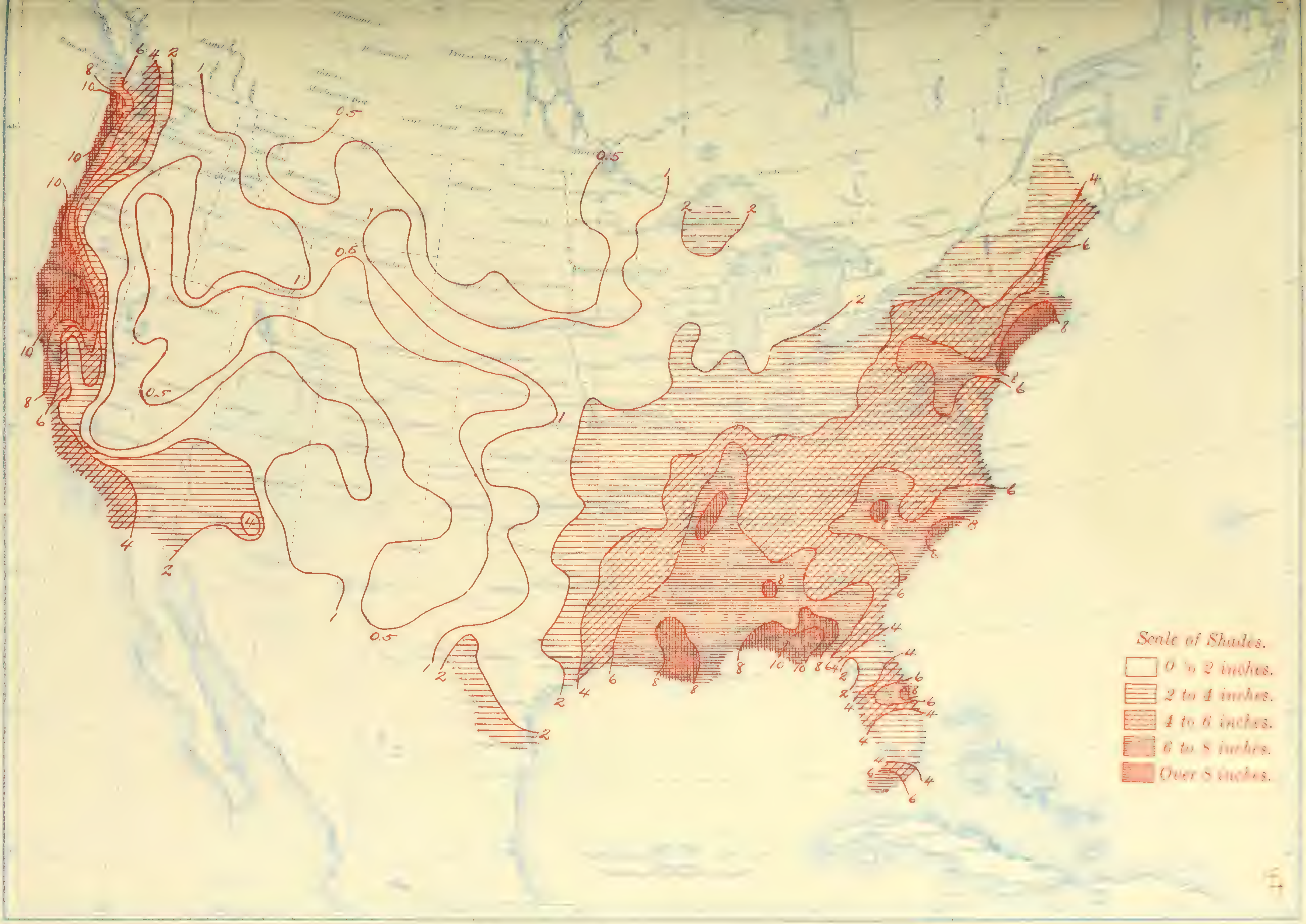
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennesee; (O) Ohio; (M) Mississippi.

Daily temperatures for January, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	46	39	41	37	45	51	44	47	56	51	41	38	48	47	48	59	42	31	36	25	34	42	20	29	33	39	40	25	39	47	57	41.2
	Minimum	19	28	25	29	23	32	32	30	25	26	38	33	24	36	27	38	36	28	14	22	8	25	20	8	18	9	14	11	8	30	36	24.3
Blandville	Maximum	49	42	44	41	44	50	44	49	52	46	43	43	49	54	58	57	55	31	32	32	31	43	27	21	33	37	40	31	37	41	56	42.3
	Minimum	26	27	28	26	24	39	31	29	31	33	35	31	29	37	35	49	31	24	9	21	17	25	13	9	15	18	20	10	16	32	41	26.2
Calhoun	Maximum	48	45	42	40	46	50	48	46	53	50	46	39	48	50	47	59	57	31	33	33	35	42	42	24	34	38	40	33	39	36	53	42.8
	Minimum	22	27	23	29	22	42	33	29	26	28	37	32	25	38	24	40	31	25	13	23	12	24	13	5	16	13	14	7	8	29	36	24.1
Earlington *	Maximum	49	39	42	34	48	51	47	48	54	50	41	39	51	48	53	60	41	30	35	25	37	37	18	23	33	36	36	23	43	49	58	41.2
	Minimum	14	28	24	29	21	25	33	30	25	26	35	32	22	29	25	27	34	28	9	17	7	7	15	6	12	12	14	9	8	11	27	20.7
Hopkinsville	Maximum	54	44	44	41	45	51	49	46	55	51	46	39	47	49	52	60	55	36	35	34	30	40	44	35	35	35	39	34	40	49	58	44.3
	Minimum	20	29	26	27	28	41	33	26	29	28	37	31	23	35	27	42	34	26	11	21	16	25	15	9	17	16	17	12	14	31	38	25.3
Marion	Maximum	47	42	44	40	43	48	48	45	51	47	44	41	48	51	50	56	45	30	33	31	31	42	36	19	31	34	37	32	38	36	56	41.2
	Minimum	23	26	25	29	22	41	32	29	29	33	36	30	25	36	31	40	30	25	13	20	12	25	12	5	14	15	18	8	11	30	36	24.5
Owensboro *	Maximum	33	35	40	45	46	46	39	47	49	49	40	46	49	43	57	56	32	31	30	39	43	28	23	28	31	35	18	36	35	52	63	40.1
	Minimum	24	22	24	30	25	40	33	28	27	30	39	33	28	34	28	40	32	26	20	10	24	28	14	5	15	14	13	7	6	21	35	24.4
Central Section																																	
Alpha	Maximum	47	48	50	45	55	53	52	45	51	54	40	39	45	46	60	62	64	50	35	29	35	44	34	26	33	31	33	34	41	41	61	44.6
	Minimum	19	31	25	30	30	52	35	23	30	24	39	24	27	44	30	50	50	35	26	25	20	34	26	21	23	24	29	25	15	32	45	30.4
Anchorage	Maximum	42	38	36	42	56	54	46	41	42	49	40	37	43	44	55	58	55	38	33	29	27	41	38	25	30	33	34	28	31	36	54	40.3
	Minimum	16	20	20	18	20	42	26	20	20	22	36	30	20	17	26	36	28	27	22	20	16	20	11	4	10	0	20	5	1	24	34	20.4
Bardstown *	Maximum	45	42	41	45	54	52	44	46	49	50	46	35	45	44	52	61	40	33	34	28	34	43	26	28	33	35	34	30	35	45	61	41.6
	Minimum	14	21	21	23	24	29	32	26	24	21	32	34	26	27	34	31	40	29	21	22	20	20	23	9	23	6	26	18	3	23	28	23.5
Bowling Green*	Maximum	41	45	42	40	47	52	43	45	49	53	44	40	45	44	53	60	65	40	36	30	36	34	41	26	32	36	32	26	33	58	58	42.8
	Minimum	15	15	19	25	19	37	30	23	24	23	26	25	22	27	30	34	38	34	17	20	16	20	17	10	15	13	13	11	9	18	30	21.8
Edmonton	Maximum	45	42	45	45	49	54	50	50	50	50	50	50	46	46	50	60	58	46	35	31	32	32	45	23	31	32	33	32	32	46	62	43.6
	Minimum	16	30	22	21	21	44	21	20	27	21	46	36	24	30	31	42	38	35	21	21	11	21	20	13	19	12	28	16	8	30	40	25.1
Eubank*	Maximum	44	41	41	41	53	52	46	..	48	48	38	35	41	49	55	61	55	45	39	34	35	46	28	26	29	32	36	28	36	43	61	[a]42.2
	Minimum	12	17	20	22	23	23	32	21	..	22	23	32	25	26	32	33	37	30	25	25	18	20	24	14	20	15	19	19	8	20	29	[a]22.9
Frankfort	Maximum	47	48	37	43	52	54	59	46	45	50	56	45	43	46	53	63	63	50	39	39	30	40	44	27	29	38	38	40	33	35	57	44.8
	Minimum	17	22	20	24	20	38	33	26	21	22	31	34	27	28	34	33	39	29	25	24	20	23	19	8	11	4	24	18	3	24	33	23.7
Franklin	Maximum	45	42	43	42	46	52	49	47	52	53	49	37	45	45	48	59	56	42	34	34	33	45	35	25	34	31	35	29	33	41	60	42.6
	Minimum	22	29	25	27	26	44	32	28	29	31	35	32	26	35	31	43	40	26	21	22	15	26	15	12	17	15	21	15	13	31	39	26.5
Greensburg*	Maximum	46	42	43	35	53	55	42	47	52	52	42	38	46	43	55	62	50	33	34	29	33	45	27	24	33	33	35	23	38	45	64	41.9
	Minimum	15	20	23	24	20	21	34	22	24	23	28	35	25	26	37	37	47	30	24	24	18	20	26	12	13	11	13	19	9	10	30	23.2
Irvington	Maximum	45	41	39	40	49	50	47	41	47	48	44	38	45	48	46	59	56	36	34	32	25	41	41	25	30	35	33	20	36	37	57	41.1
	Minimum	21	28	22	30	25	45	33	30	27	28	37	34	25	36	27	41	36	29	18	21	17	22	15	6	17	10	17	11	4	28	35	25.0
Leitchfield	Maximum	45	40	40	41	50	50	48	44	49	51	44	39	44	44	49	58	50	35	34	30	30	41	40	27	28	33	35	30	38	36	60	41.4
	Minimum	18	29	23	28	22	43	30	26	23	25	35	32	22	32	28	39	32	27	15	20	17	22	14	8	16	13	27	11	7	28	34	24.1
Lexington	Maximum	41	37	35	40	50	52	40	40	45	46	40	35	40	42	50	59	56	32	30	29	26	41	39	23	26	31	32	28	29	38	57	39.0
	Minimum	20	21	19	25	28	40	30	27	28	31	33	31	27	34	35	39	30	25	24	19	19	23	12	8	16	16	26	14	12	24	38	25.0
Loretto	Maximum	44	42	38	41	51	52	51	44	48	49	43	39	42	43	60	..	..	41	32	31	32	42	44	25	32	23	34	33	31	35	61	[1]41.1
	Minimum	18	28	20	28	20	43	31	26	38	39	33	34	22	35	31	..	..	28	21	21	19	21	19	9	12	1	27	15	1	26	34	[1]24.1
Louisville	Maximum	43	36	36	39	49	50	42	42	46	48	42	37	44	45	47	58	56	32	32	30	26	41	30	25	31	32	35	24	30	38	55	39.4
	Minimum	22	23	21	26	26	34	33	31	26	31	35	33	28	34	30	41	28	26	21	21	20	23	9	4	16	13	15	12	12	25	38	24.4
Do. (Cherokee Park)	Maximum	43	41	36	37	48	49	49	41	45	47	47	38	43	45	47	57	56	38	33	32	26	37	39	24	27	31	33	34	30	34	49	39.9
	Minimum	19	27	20	25	21	43	32	26	23	25	37	34	23	29	29	33	36	27	22	21	20	21	20	5	16	7	14	12	4	24	33	23.5
St. John *	Maximum	14	39	38	40	48	50	43	45	48	48	39	38	43	43	49	59	46	30	23	27	32	42	25	25	34	33	32	24	35	44	58	39.5
	Minimum	12	19	21	21	22	25	31	22	23	24	25	32	21	22	30	31	38	27	18	20	19	19	20	7	7	11	11	13	4	14	27	20.5
Scott	Maximum	40	38	30	43	50	50	49	44	42	47	44	36	40	43	39	58	55	33	30	27	22	25	39	24	28	28	34	26	23	29	46	37.8
	Minimum	17	22	14	23	21	42	31	25	18	22	34	32	27	30	26	30	33	28	23	21	16	15	13	1	16	2	7	13	2	19	29	21.0
Shelby City	Maximum	43	41	36	39	47	52	52	43	46	48	44	39	42	42	51	59	57	44	32	31	30	38	42	22	28	32	35	33	32	35	59	41.1
	Minimum	16	29	19	27	21	40	31	25	23	25	33	33	25	32	25	33	42	30	25	21	20	22	21	12	19	11	28	19	10	25	33	25.3
Shelbyville *	Maximum	37	33	32	48	47	45	39	39	44	45	37	33	38	40	48	60	41	32	33	23	25	40	20	22	27	31	29	25	28	40	50	36.5
	Minimum	15	21	19	23	33	30	31	25	22	26	30	33	25	28	22	35	40	28	22	23	17	19	20	5	9	3	12	15	3	20	26	22.3
Taylorsville	Maximum	43	42	36	39	49	51	49	41	43	47	43	38	42	45	51	59	56	38	33	22	28	39	41	26	28	34	33	32	33	35	56	40.7
	Minimum	16	29	20	27	19	40	33	25	22	22	35	34	24	26	32	35	38	29	23	21	20	20	18	8	17	0	25	15	1	25	34	23.6
Williamstown *	Maximum	43	34	33	48	53	51	47	43	45	54	43	37	46	46	47	59	47	32	33	30	30	40	30	24	33	34	38	30	20	42	51	40.1
	Minimum	14	18	15	18	23	26	30	34	21	21	30	31	26	22	30	30	33	27	22	22	18	17	20	2	3	8	9	15	4	5	22	19.9
Eastern Section.																																	
Beattyville *	Maximum	49	43	36	56	59	58	45	50	52	55	38	36	46	50	58	64	55	44	38	33	34	49	34	29	29	34	36	30	38	36	62	44.4
	Minimum	12	12	15	12	16	19	35	18	19	19	19	33	30	23	23	26	27	34	28	28	22	12	24	18	18	11	12	23	7	8	28	20.4
Berea	Maximum	14	43	48	41	58	49	49	46	46	53	49	37	46	55	54	56	47	43	34	30	31	40	46	33	29	33	36	31	34	36	63	43.2
	Minimum	14	25	18	28	22	27	31	26	27	25	32	32	33	38	38	38	32	30	26	20	20	17	21	13	20	11	18	19	13	26	34	25.0
Farmers	Maximum	47	47	34	48	56	56	55	44	48	51	42	40	43	52	55	64	61	48	36	35	31	41	46	26	30	38	36	35	37	32	53	44.1
	Minimum	15	28	14	29	13	50	33	20	18	18	29	34	30	24	36	29	46	32	28	23	22	15	25	14	16	8	29	21	5	22	32	24.5
Maysville*	Maximum	45	33	34	48	55	53	44	45	41	53	40	38	43	51	50	64	49	34	35	32	30	42	29	27	32	36	39	29	25	41	51	40.9
	Minimum	15	22	14	20	20	19	32	26	20	20	23	32	29	31	30	29	28	30	24	25	20	17	24	7	10	7	8	19	5	6	23	20.5
Middlesboro	Maximum	44	43	45	51	54	52	52	45	49	51	41	42	45	51	57	62	58	55	52	33	32	38	48	32	35	38	38	37	43	44	65	46.2
	Minimum	16	33	20	32	23	43	36	22	26	21	30	32	30	25	25	30	48	40	29	24	22	21	27	26	29	27	33	27	18	31	39	28.5
Mount Sterling*	Maximum	42	40	41	40	49	55	54	41	43	46	40	36	40	45	49	52	53	35	33	31	33	44	44	27	28	34	34	26	30	42	56	40.7
	Minimum	15	18	21	22	25	27	32	30	24	25	29	33	20	30	35	35	36	30	25	26	20	20	25	12	14	14	17	20	12	15	24	23.9
Richmond *	Maximum	43	40	32	40	52	54	40	43	47	54	40	36	42	45	56	62	50	34	34	28	29	44	31	26	29	37	36	23	33	40	60	40.6
	Minimum	22	30	19	24	26	43	31	27	27	28	34	33	28	32	38	37	42	30	25	26	20	20	26	12	20	13	28	20	12	23	37	26.9
Weeksbury	Maximum	46	45	40	53	58	58	52	46	53	47	42	39	39	51	55	62	60	61	46	41	30	48	50	35	36	33	33	34	35	36	65	46.1
	Minimum	25	18	18	31	25	42	23	27	24	27	24	23	25	25	38	31	34	39	29	22	19	15	22	26	25	25	30	26	15	26	34	26.2
Williamsburg*	Maximum	48	38	48	51	53	54	52	35	45	43	51	35	46	53	56	60	56	45	38	32	32	52	46	43	30	33	33	35	40	41	64	44.8
	Minimum	20	17	33	30	20	24	35	23	24	30	35	21	30	30	32	30	35	33	28	27	22	22	28	25	22	22	23	28	17	17	32	26.3

*Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
4

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

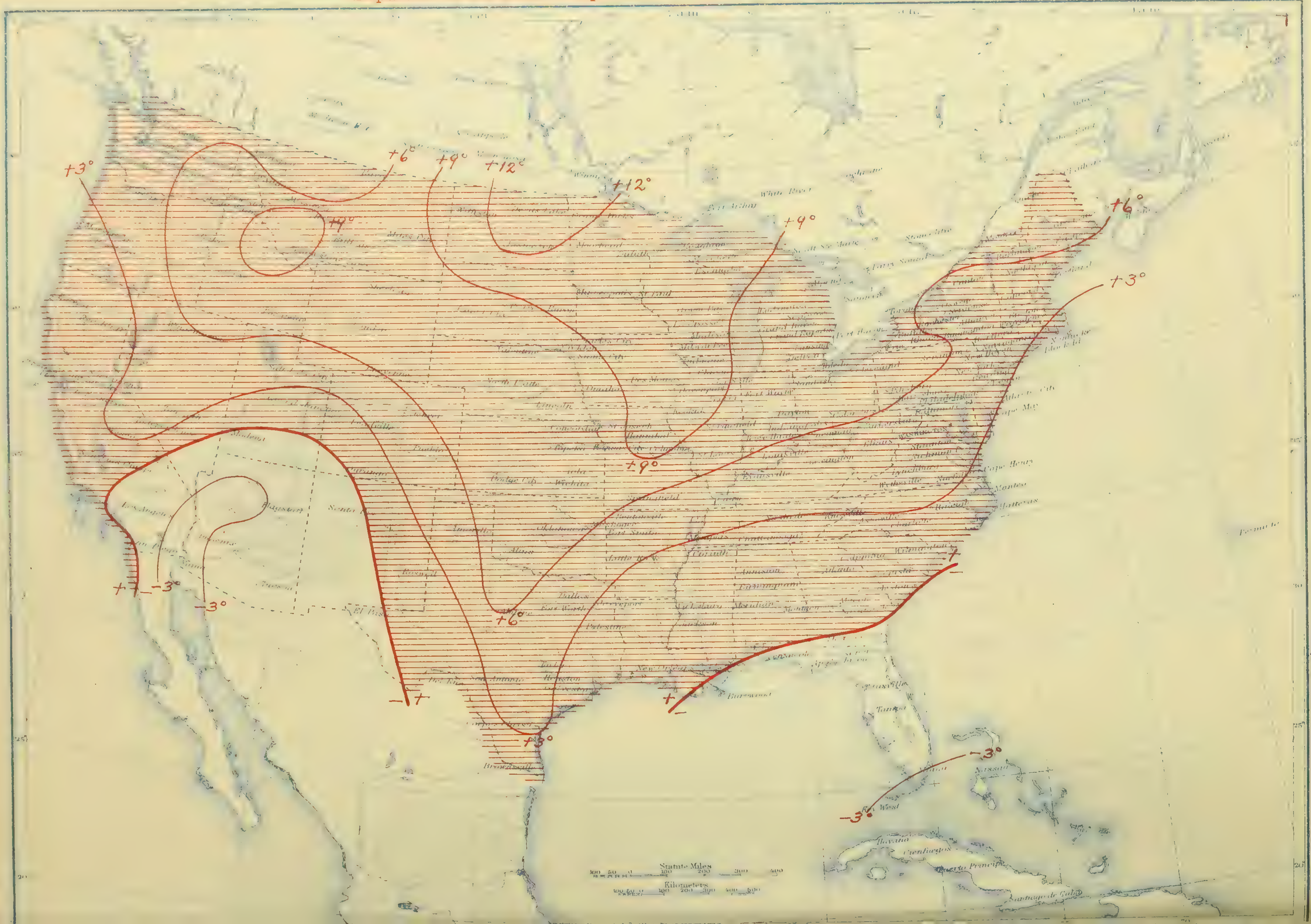
KENTUCKY SECTION

FEBRUARY, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 22, 1915

Departure of the Mean Temperature from the Normal, February, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., February, 1915. No. 2

GENERAL SUMMARY.

The general weather conditions prevailing during February, 1915, in this section were remarkably favorable for a winter month. There was a notable absence of winter storms and of any severe winter weather. Only five times during the past 27 years has the temperature in Kentucky for February averaged higher than, or as high as, that of this year. Of these Februarys, three were those of 1890, 1891 and 1892, and the other two, those of 1909 and 1911. The highest temperature reached in the State during the month, 75°, has been exceeded many times during that same period; but, 13°, the lowest temperature reported this month in the State, is the highest state minimum in the Kentucky Section records for February except in one year, namely, 1890, when the lowest was 16°.

Precipitation for the month averaged less than one-half of the February normal over the State as a whole, and was considerably below normal at every station. There was very little snow.

Spring plowing was begun in various localities before the close of the month; and, at the end, trees and shrubbery were showing buds and crocuses had appeared.

PRESSURE.

Persistent high pressure areas largely dominated during the month. A well developed low pressure area from the Rocky Mountain plateau region, centered the morning of the 1st in the central Mississippi Valley, and which moved slowly eastward with decreasing energy during the 1st and 2d, was the only important disturbance of the month passing over this section. The other low pressure areas, three in number, passed well to the west and north in their movement eastward.

TEMPERATURE.

As obtained from the records of 37 stations, the mean temperature for the state was 41.9°, which was 6.5° above normal for February. There were three distinctly warm and three distinctly cold periods during the month. None of these periods were of long duration, and in none of them was the departure of temperature from normal excessive. The warm periods were the 1st, 11-14th and 20-24th, with maximum temperatures in the 60's and 70's, and the cold periods were the 7-10th, 17th and 27th, with minimum temperatures ranging between 13° and 25°. The highest temperature, 75°, occurred at Beattyville on the 22d, and the lowest, 13°, at Eubank on the 9th.

PRECIPITATION.

Average precipitation for the State, as determined from the records of 48 stations, was 1.74 inches, which is 2.00 inches less than the normal amount for February. Between 1 and 3 inches occurred over most of the State, but in several widely scattered localities there was less than one inch. The total amounts at the various reporting stations ranged between 0.51 inch and 2.83 inches. Moderate to heavy rains occurred on the 1st and good rains, with some thundershowers, on the 5th; light rains were general on the 14th and in the period 21st-24th. Light snow, mostly flurries, occurred on the 2d, 6-7th and 25th; but at only three stations, two of which are located in the mountain section, did the snowfall during the entire month measure as much as one inch.

WIND.

The total wind movement at Louisville was 9128 miles and at Lexington 7870 miles, the average hourly velocity being 13.6 and 11.7 miles, respectively. The maximum velocity for five minutes was at the rate of 48 miles an hour from the southwest on the 5th at Louisville, and 39 miles an hour from the southeast on the 5th at Lexington.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 77 per cent. and at 7 p. m. 62 per cent. This is slightly below normal.

SUNSHINE AND CLOUDINESS.

Sunshine was 54 per cent of the possible amount for February at Louisville and 37 per cent at Lexington. The average at Louisville for the past 15 years is 52 per cent.

MISCELLANEOUS.

Heavy rains of the period, January 30th-February 1st, caused high water in the streams of the State during the first part of February. The Ohio River passed the flood stage at all points, except Paducah, but no damage of consequence resulted.

High winds were general over the State on the 5th.

Comparative Data for February

Year.	Temperature. Monthly average.	Temperature. Departure from 25 year normal.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Monthly average.	Precipitation. Departure from 25 year normal.
1889..	34.1	−1.3	74	3	1.91	−1.83
1890..	45.6	+10.2	86	16	7.98	+4.24
1891..	42.2	+6.8	76	[illegible]	4.72	+0.98
1892..	42.2	+6.8	70	11	2.92	−0.82
1893..	37.7	+2.3	70	3	4.40	[illegible]
1894..	34.6	−0.8	74	2	[illegible]	+0.92
1895..	25.9	−9.5	80	−18	0.66	−3.08
1896..	37.4	+2.0	81	−12	3.06	−0.68
1897..	39.8	+4.4	76	8	5.75	+2.01
1898..	37.4	+2.0	77	[illegible]	1.61	−2.13
1899..	26.2	−9.2	71	−33	3.97	+0.23
1900..	32.5	−2.9	76	9	4.68	+0.94
1901..	32.4	−3.0	71	1	1.27	−2.47
1902..	27.9	−7.5	69	[illegible]	1.30	−2.44
1903..	37.5	+2.1	75	−16	7.28	−3.54
1904..	35.2	−0.2	75	2	[illegible]	−1.42
1905..	27.9	−7.5	67	16	[illegible]	−1.30
1906..	34.7	−0.7	75	12	1.81	−1.93
1907..	35.7	[illegible]	73	−10	3.06	[illegible]
1908..	[illegible]	+0.2	70	2	5.56	+1.82
1909..	42.4	+7.0	75	8	[illegible]	+4.43
1910..	32.9	−2.5	66	12	4.70	[illegible]
1911..	42.0	+6.6	[illegible]	11	3.25	−0.49
1912..	29.7	[illegible]	68	−14	[illegible]	−0.66
1913..	34.8	−0.6	77	−2	2.94	−0.80
1914..	32.2	−3.2	69	2	4.14	[illegible]
1915..	41.9	+6.5	75	13	1.74	−2.00

Climatological data for February, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Section.																				
Beaver Dam	Ohio	441	11	42.6	+ 8.2	68	22	19	9	29	1.02	−2.80	0.42	......	4	4	10	14	S	W. T. Austin.
Blandville	Ballard	445	33	42.8	+ 6.4	66	13	23	8†	25	2.67	−2.09	1.09	1.5	8	7	5	16	NW	E. W. Horr.
Calhoun	McLean	393	11	45.2	+ 8.6	66	12†	20	8	25	1.54	−2.28	0.58	T.	8	5	10	13	NW	W. A. Taylor.
Earlington	Hopkins	370	24	42.2	+ 5.8	69	13†	17	9	36	1.78	−2.22	0.83	......	7	7	6	15	N	Brick Southworth.
Hopkinsville	Christian	524	18	44.7	+ 7.9	72	6	21	8†	40	1.02	−3.13	0.60	......	4	14	0	14	......	W. F. Randle.
Marion	Crittenden	571	17	42.0	+ 6.3	67	13	20	8	26	1.38	−1.99	0.42	T.	5	6	6	16	N	B. C. Paris.
Owensboro	Daviess	479	17	42.4	+ 7.8	67	21	20	8	27	1.24	−2.25	0.69	T.	6	5	9	14	NW	Henry S. Berry.
Paducah	McCracken	341	26	......	......	......	......	......	......	......	2.44	−1.26	0.76	......	6	......	......	......	......	F. L. Brown.
Central Section.																				
Alpha	Clinton	......	21	44.6	+ 6.1	68	22	18	9	31	1.30	−3.20	0.60	T.	4	10	3	15	W	W. W. Hicks.
Anchorage	Jefferson	700	13	40.7	+ 8.5	67	22	14	9	32	0.93	−2.30	0.52	T.	4	12	8	8	W	C. E. Barret.
Bardstown	Nelson	637	17	42.4	+ 7.9	70	22	17	9	33	2.05	−2.11	0.90	T.	9	9	3	16	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	42.7	+ 5.5	68	22	17	9	35	1.95	−2.20	0.88	......	7	17	6	5	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	......	2.79	−1.47	1.34	T.	8	......	......	......	......	K. W. Massey.
Cloverport	Breckenridge	......	1	......	......	......	......	......	......	......	1.17	......	0.56	......	8	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	43.2	+ 6.8	67	22	17	9	34	2.00	−2.41	0.90	T.	5	8	8	12	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	$^{b}39.6$	+ 6.3	68^{b}	22	13^{b}	9†	41^{b}	2.36	−1.73	1.00	......	6	3^{b}	5^{b}	18^{b}	W	Mrs. Katie Payne.
Frankfort	Franklin	560	23	44.0	+ 9.2	74	1	17	9	35	1.57	−1.99	0.68	T.	8	8	8	12	S	Geo. L. Barnes
Franklin	Simpson	691	20	43.4	+ 4.8	67	22	23	9	29	2.56	−2.33	1.46	T.	6	5	12	11	NW	J. E. Newman.
Greensburg	Green	581	22	41.8	+ 8.1	70	22	18	9	36	1.84	−2.29	0.71	T.	10	4	2	22	SW	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	......	......	......	......	......	......	......	1.58	−2.10	0.77	......	6	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	......	17	42.2	+ 8.4	67	22	20	8†	26	0.97	−2.54	0.61	T.	4	12	3	13	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	42.2	+ 8.2	66	22	19	9	28	1.43	−2.35	0.90	T.	5	9	7	12	NW	John E. Stone.
Lexington	Fayette	989	30	39.8	+ 4.2	64	22	18	8	24	1.12	−2.11	0.65	0.2	10	5	8	15	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	42.6	+ 8.7	68	22	15	10	36	1.46	−1.73	0.64	......	11	10	6	12	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	41.8	+ 5.2	65	22	20	8	24	0.93	−2.82	0.55	T.	6	4	10	14	S	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	......	5	42.0	......	66	22	19	8†	27	1.64	......	0.65	T.	6	7	11	10	SW	Wm. I. Hunt.
St. John	Hardin	777	18	40.4	+ 7.4	66	22	17	9	32	2.43	−1.73	1.30	T.	8	9	2	17	......	Sisters of Loretto.
Scott	Kenton	......	17	40.6	+10.4	63	14	17	8	29	1.29	−1.58	0.51	0.3	8	11	4	13	S	E. B. Wilson.
Shelby City	Boyle	1087	20	41.6	+ 8.5	70	22	18	9†	32	2.12	−1.51	0.84	......	7	12	3	13	S	H. F. Ewing.
Shelbyville	Shelby	759	25	38.7	+ 4.7	64	22	18	9	27	2.83	−0.77	1.41	T.	7	11	3	14	W	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	41.4	+ 7.2	66	22	17	9	29	1.77	−2.35	0.72	T.	5	8	6	14	SW	E. D. Bourne.
Williamstown	Grant	943	12	38.6	+ 7.6	64	22	15	7	36	1.35	−1.93	0.85	0.8	7	10	5	13	......	Miss Rose Carter.
Eastern Section.																				
Beattyville	Lee	650	10	40.6	+ 6.7	75	22	15	10	52	1.58	−2.86	0.86	T.	7	3	15	10	E	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	43.1	+ 7.3	70	23	19	8	32	2.14	−1.03	0.73	2.3	6	6	3	19	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26	......	......	......	......	......	......	......	1.74	−2.16	0.44	T.	10	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	......	......	......	......	......	......	......	2.15	−1.09	1.13	0.5	10	10	2	16	S	J. V. Oldham.
Farmers	Rowan	668	8	41.9	+ 6.3	68	22	17	10†	42	0.84	−2.33	0.54	T.	4	12	5	11	......	Lee Craycraft.
Hazard	Perry	......	1	......	......	......	......	......	......	......	1.59	......	0.50	......	7	......	......	......	......	Kelly E. Watts.
Jackson	Breathitt	......	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
London	Laurel	......	0	......	......	......	......	......	......	......	2.16	......	1.15	0.0	9	12	3	13	E	C. R. Lee.
Louisa	Lawrence	......	10	......	......	......	......	......	......	......	1.46	−2.58	0.45	T.	8	......	......	......	......	G. M. Guerin.
Manchester	Clay	......	3	......	......	......	......	......	......	......	1.14	......	0.95	......	4	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	38.8	+ 5.4	66	22	16	8	40	2.13	−1.32	1.04	0.8	11	10	6	12	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	42.6	+ 3.6	67	22	15	9	41	2.68	−2.65	1.35	......	8	14	8	6	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	39.1	+ 5.8	65	22	17	8	35	1.88	−2.39	0.66	T.	7	7	12	9	W	H. Clay McKee.
Pikeville	Pike	......	8	......	......	......	......	......	......	......	1.56	−1.95	0.38	1.0	8	......	......	......	......	I. M. Williams.
Richmond	Madison	926	22	41.8	+ 6.9	69	22	20	8†	31	2.42	−1.22	1.55	0.1	6	11	2	15	......	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	43.2	......	66	13	19	10	38	1.45	......	0.35	1.0	7	16	4	8	S	O. A. Lund.
Williamsburg	Whitley	939	18	41.9	+ 4.6	70	22	15	9†	48	1.84	−1.65	1.23	T.	7	11	5	12	W	N. C. Jones.
State averages and extremes				41.9	......	75	22	13	9†	52	1.74	......	1.55	0.2	8	9	6	13	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for February, 1915.

Stations		Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Section.																																	
Beaver Dam	G	.37	.10		.42	T.																		.13									[illegible]
Blandville	M		.15		.34	.14								.59	.04							[illegible]	[illegible]	.19					T				[illegible]
Calhoun	G	.38	.06	.02		.58		T							.23							.18	.02	.07	T	T							1.54
Farlington	G	.83		.06		.37	.09								.24								.14	.05									1.78
Hopkinsville	C		.12			.60									.20							.10											1.02
Marion		T	.19		T	.42									.21							.35		.21									1.38
Owensboro	O	.69	.04			.33		T							.03							.12		.13									[illegible]
Paducah‡	O	.76		.05		.41									.45							T	.32	[illegible]									[illegible]
Central Section.																																	
Alpha	C	T	T		.60	.15	T.								.15									.10		T							[illegible]
Anchorage	O	.29	.10			.52	T.	T							T							.02	T	T	T	T							[illegible]
Bardstown	S	.90	.33	.04		.34	.20		T						.02								.08	.10	.04	T							2.05
Bowling Green	G	.88	.20	.23		.50	.05								T								.05	.04	T								[illegible]
Burnside	C	1.34	.16	.08		.51	.28		T	T					.05	.32							T.	T.	.05		T						2.79
Cloverport	O	.41	.03	.03		.40	.16								T								.09	.04	.01	T							1.17
Edmonton	G	.90	.21		.64										.06							T		.19									[illegible]
Eubank	C	1.00			.55		.12								T.	.52							.05		.12								[illegible]
Frankfort	K	.68	.09	.02		.39	.29	T	T						.02	T.							.04	T	.01	T	T						1.57
Franklin	G	1.46	.17			.58									.10							.11		.14		T.			T				2.56
Greensburg	G	.71	.14	.05		.46	.10	T.	T.						.03	.04							.06	.04	.21								1.84
High Bridge‖	K	.77				.50	.12									.03							.09		.07	T.							1.58
Irvington	O	.04	.12			.61	T	T							T							T.		.20	T.	T.							0.97
Leitchfield	G	.22	T.		*	.90									T							.12		.19									1.43
Lexington ***	K	.15	.05		.03	.62	T.	.01	.01						.02							.04	.01	.18	T	T							1.12
Loretto	S	.64	.15	.01	.01	.42	T.		T.	T	.01	.02			.01		T					T	.03	.14		.02	T	T					1.46
Louisville***	O	.18	.05	T.	.13	.42	T.	T						T	T							.05		.10	T.	T							[illegible]
Do (Cherokee Park)	O	.55	.19			.65	T.								.02							T	.06	.17									1.64
St. John	S	1.30	.10	.05		.35	.05	T.	T						.25								.05	.28	T.								2.43
Scott	L	.36	.08	T.		.51	.08	T.	T.				.13		.03							T	T	.07	T	.03							1.29
Shelby City	K	.75				.84	.10								.12								T.	.24	.05	.02							2.12
Shelbyville	S	1.41	.42	.07		.44	.24		T.						T								T	.08	.17	T	T						2.83
Taylorsville	S	.72	.35	T.		.62	T.	T.	T						.02							T		.06	T	T							1.77
Williamstown	L	.85	.04		.21	.17	.01	.06							T								T		T	T	.01						1.35
Eastern Section.																																	
Beattyville‡	K	.86	T.	.10	T.	.03	.18	T	T	T					.02	.36								T	.03	T.	T.						1.58
Berea	K	.73	.03		.12	.60		T.	.23						.43																		2.14
Catlettsburg	B	.40	.18	.44			.20	T.	T					.04	T.	.28							.10	.02	.02	T	.06						1.74
Falmouth‡	L	1.13		.02		.40	.30	T.	.02					.06	.05	T							.02		.13	.02	T						2.15
Farmers	L	.54				.20	.05	T.	T														.05	T	T								0.84
Hazard	K	.50	.20	.30	T.	.12		T	.05	T.						.40	T								.02								1.59
Jackson	K																																
London	C	1.15	.02	.05		.06	.20							.05	.55								.05		.03								2.16
Louisa	B	.45	.15	.32			.15	T.	T.	T.						.28							.04		.03	.04							1.46
Manchester	K	.95	.07	.05												.07																	1.14
Maysville	O	1.04	.05			.39	.27	T.	.04					.04		.06							.06	.03	.12	.03	T						2.13
Middlesboro	C	1.35	.05			.12									.24	.40								.25	.12	.15							2.68
Mount Sterling	L	.66	.08	T.			.51		.05							.31							.05		.22	T.	T.						1.88
Pikeville	B	.32	.16	.38			.26		.06	T.						.26									.08	.04	T						1.56
Richmond	K	1.55		T.		.47	.12	T.	.04							.20							T		T.		.04						2.42
Weeksbury	B	.30	.30			.20		.10								.35							.05	.15									1.45
Williamsburg ‖	C	1.23	.02	.08		.03	.10			T.						.36							.02		T.								1.84

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

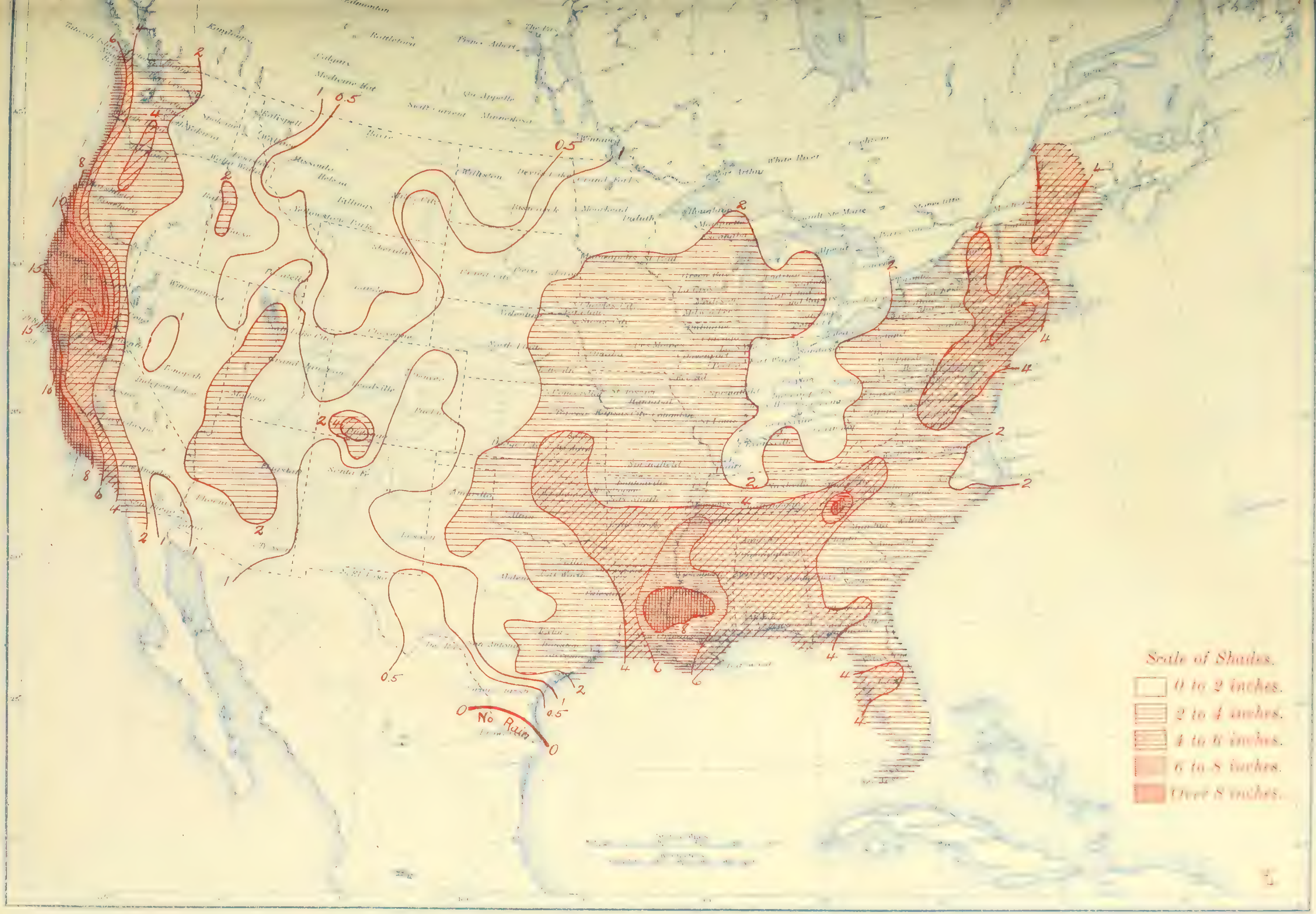
‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for February, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Section.																																	
Beaver Dam *	Maximum	64	37	36	54	53	34	37	46	44	54	59	66	65	63	47	47	51	56	56	60	70	68	60	44	38	43	38	38	..	..	..	50.3
	Minimum	45	36	33	32	33	34	21	33	19	25	41	48	49	53	31	28	24	31	29	36	35	43	55	44	33	23	27	29	..	..	..	35.0
Blandville	Maximum	58	40	59	51	47	37	41	37	43	57	62	64	66	55	48	48	51	56	55	57	51	61	59	44	58	41	38	42	..	..	..	49.5
	Minimum	40	31	31	33	37	32	31	23	23	32	45	50	53	47	33	28	30	34	41	43	40	48	42	37	31	29	23	33	..	..	..	36.1
Calhoun	Maximum	63	57	35	55	53	40	34	37	46	54	59	66	65	63	54	49	52	57	55	58	55	66	64	46	39	45	42	39	..	..	..	51.7
	Minimum	51	33	32	32	39	33	28	20	22	29	42	49	49	52	37	39	42	47	45	50	41	56	46	38	34	35	30	33	..	..	..	38.7
Earlington *	Maximum	65	36	37	55	52	37	38	36	46	56	62	68	69	69	49	48	54	59	56	61	52	68	56	41	38	40	39	39	..	..	..	50.9
	Minimum	46	34	33	31	34	23	27	22	17	20	32	46	51	51	28	27	22	28	30	37	36	40	52	39	23	33	25	30	..	..	..	33.5
Hopkinsville	Maximum	63	57	45	54	51	72	44	40	44	57	61	68	69	64	55	49	53	58	56	59	54	65	62	50	41	39	40	39	..	..	..	53.9
	Minimum	50	32	32	31	40	32	27	21	21	29	39	44	57	51	33	29	25	31	38	38	40	43	44	39	33	33	29	33	..	..	..	35.5
Marion	Maximum	62	48	36	51	47	38	37	36	42	55	60	64	67	59	48	44	50	55	55	56	49	62	61	43	38	39	41	37	..	..	..	49.3
	Minimum	48	31	31	31	38	32	27	20	22	29	28	48	48	47	32	28	27	29	36	41	38	46	43	38	32	33	29	32	..	..	..	34.8
Owensboro *	Maximum	49	35	54	59	39	32	33	40	51	57	65	65	60	52	44	50	54	57	58	49	67	61	44	40	42	28	38	43	..	..	..	49.1
	Minimum	49	34	33	32	39	32	28	20	29	28	38	47	49	52	32	30	28	32	33	38	41	45	44	37	34	34	28	32	..	..	..	35.6
Central Section.																																	
Alpha	Maximum	62	58	37	56	53	45	42	30	45	52	60	61	58	56	55	47	54	56	58	62	56	68	57	55	40	43	43	41	..	..	..	51.8
	Minimum	58	35	34	30	45	34	27	25	18	19	45	52	54	55	39	33	24	28	29	33	43	54	55	40	25	33	35	33	..	..	..	37.3
Anchorage	Maximum	63	53	35	53	53	39	30	34	40	48	58	62	63	65	46	46	48	52	56	62	55	67	64	43	36	46	44	40	..	..	..	50.0
	Minimum	40	33	32	30	39	29	27	18	14	20	32	46	40	45	30	24	21	28	24	38	39	44	40	35	32	28	22	28	..	..	..	31.4
Bardstown *	Maximum	65	42	39	52	54	36	33	37	44	53	58	66	61	66	52	52	51	56	61	63	56	70	64	41	38	48	39	39	..	..	..	51.3
	Minimum	43	39	32	30	32	34	27	21	17	20	36	45	48	50	33	32	25	25	28	32	36	43	50	39	32	32	25	28	..	..	..	23.4
Bowling Green *	Maximum	64	55	43	58	57	47	40	37	45	55	60	65	66	66	53	50	55	57	58	63	57	68	65	48	38	44	45	46	..	..	..	53.8
	Minimum	48	38	30	26	39	30	25	20	17	20	33	37	37	48	32	28	22	26	26	31	32	40	52	37	30	30	25	25	..	..	..	31.6
Edmonton	Maximum	62	54	39	56	58	46	46	41	46	53	62	65	60	58	59	47	46	56	62	59	56	67	60	50	40	43	41	39	..	..	..	52.5
	Minimum	42	32	32	39	41	32	28	23	17	26	49	46	41	40	32	30	24	28	28	30	30	48	50	40	32	30	25	30	..	..	..	33.8
Eubank *	Maximum	60	49	37	57	53	46	43	33	42	51	59	..	63	54	50	47	49	54	60	59	46	68	60	..	40	44	38	38	..	..	..	50.0
	Minimum	40	42	32	27	27	37	25	20	13	13	18	37	..	40	32	24	22	24	28	26	29	33	48	37	..	31	22	29	..	..	..	29.1
Frankfort	Maximum	71	62	43	57	58	51	40	35	41	51	60	63	75	69	65	70	48	58	57	58	62	65	67	64	46	47	48	45	..	..	..	55.3
	Minimum	41	34	33	31	42	31	27	20	17	23	32	45	38	48	31	32	24	28	29	30	27	45	52	38	23	31	24	26	..	..	..	32.6
Franklin	Maximum	62	54	35	55	55	39	43	37	43	53	59	63	65	65	60	48	50	55	55	57	50	67	64	45	41	48	39	38	..	..	..	51.6
	Minimum	51	32	31	31	37	32	27	24	23	28	40	45	49	52	31	31	27	29	34	37	40	47	44	39	33	33	29	32	..	..	..	35.3
Greensburg *	Maximum	63	42	41	58	55	37	41	36	43	53	61	65	65	61	53	47	51	57	60	61	63	70	58	44	38	43	40	39	..	..	..	51.6
	Minimum	43	41	34	29	30	34	27	22	18	21	25	42	40	47	30	31	21	27	27	29	29	38	48	40	24	33	25	29	..	..	..	31.9
Irvington	Maximum	62	58	36	55	51	39	35	33	40	51	57	65	63	62	49	46	46	54	57	59	52	67	62	50	43	43	37	37	..	..	..	50.3
	Minimum	45	35	31	33	39	32	27	20	20	32	32	42	44	45	32	30	25	30	31	39	37	47	50	36	32	32	25	30	..	..	..	34.0
Leitchfield	Maximum	64	55	36	56	53	40	36	33	41	52	56	63	61	65	56	45	48	53	57	59	51	66	62	50	38	41	40	37	..	..	..	50.6
	Minimum	45	32	32	29	40	32	27	20	19	25	42	45	44	51	30	29	26	29	29	34	33	45	50	25	32	31	27	30	..	..	..	33.7
Lexington	Maximum	59	50	36	53	51	35	29	29	35	47	57	61	61	57	46	43	44	49	55	57	56	64	58	42	33	40	36	35	..	..	..	47.1
	Minimum	49	33	32	32	35	28	22	18	22	23	37	46	44	43	35	31	24	26	32	38	36	45	42	32	30	29	23	24	..	..	..	32.5
Loretto	Maximum	63	59	39	56	54	45	34	35	41	51	59	63	64	64	57	48	49	55	59	58	56	68	65	56	38	43	40	39	..	..	..	52.1
	Minimum	52	33	33	28	42	34	27	21	16	15	40	48	44	52	33	31	20	25	24	31	28	45	54	38	32	32	23	28	..	..	..	33.2
Louisville	Maximum	62	47	37	52	51	36	31	34	39	50	56	62	63	63	45	45	48	52	55	58	54	65	61	43	36	44	41	38	..	..	..	48.9
	Minimum	47	34	33	33	36	27	24	20	24	26	46	50	48	45	35	32	26	31	34	39	40	49	43	36	33	30	25	28	..	..	..	34.8
Do. (Cherokee Park)	Maximum	62	60	37	51	52	44	33	33	37	47	57	62	62	64	56	44	46	51	54	58	55	66	63	54	38	43	43	39	..	..	..	50.4
	Minimum	43	35	33	30	43	31	27	19	19	23	38	49	44	52	34	31	23	29	27	32	32	45	53	37	33	31	22	28	..	..	..	33.7
St. John *	Maximum	63	39	38	54	50	35	35	37	43	51	55	60	65	64	49	48	47	52	59	58	52	66	63	39	28	45	37	36	..	..	..	49.2
	Minimum	43	33	31	31	30	32	26	20	17	19	27	50	44	46	29	27	24	25	27	30	31	42	48	37	22	30	25	25	..	..	..	31.5
Scott	Maximum	58	52	37	45	48	47	30	50	43	47	57	53	60	63	57	46	43	47	58	60	57	62	62	57	35	43	39	37	..	..	..	49.0
	Minimum	40	33	29	29	40	28	23	17	21	20	38	48	46	52	32	29	21	26	31	31	32	46	52	35	31	27	21	21	..	..	..	32.1
Shelby City	Maximum	60	58	39	55	53	52	36	33	40	50	58	62	60	58	56	48	45	50	58	60	57	70	62	55	38	43	40	37	..	..	..	51.2
	Minimum	33	34	32	29	40	32	26	20	18	18	33	46	39	52	33	29	23	24	27	30	27	46	54	38	32	20	25	26	..	..	..	32.0
Shelbyville *	Maximum	62	39	35	49	50	33	26	30	37	45	52	58	58	60	43	43	42	47	53	56	57	64	59	39	33	46	35	35	..	..	..	45.9
	Minimum	39	39	32	30	31	32	26	19	18	21	25	42	45	45	31	31	22	26	30	32	34	38	46	38	22	30	22	25	..	..	..	31.5
Taylorsville	Maximum	62	49	37	53	51	43	33	33	38	47	57	62	61	62	54	47	46	52	55	57	56	66	63	52	38	43	39	37	..	..	..	49.8
	Minimum	44	37	32	29	43	33	27	20	17	21	37	44	38	52	30	32	21	29	26	29	27	46	52	38	33	32	24	28	..	..	..	32.9
Williamstown *	Maximum	61	42	61	50	32	29	32	31	41	45	58	56	60	62	50	45	45	48	60	61	59	64	61	44	36	46	39	36	..	..	..	48.4
	Minimum	33	39	31	31	31	22	15	16	19	22	22	31	39	41	41	30	20	25	25	30	33	34	46	36	33	24	19	21	..	..	..	28.9
Eastern Section.																																	
Beattyville *	Maximum	65	47	40	62	55	39	34	32	41	56	64	65	65	62	54	51	51	57	67	66	65	75	63	44	35	45	44	44	..	..	..	53.1
	Minimum	35	42	34	32	36	34	28	21	21	15	17	30	30	30	36	27	17	20	23	24	21	23	45	42	25	13	18	19	..	..	..	28.1
Berea	Maximum	64	57	39	41	53	51	34	29	41	52	64	64	63	58	54	52	48	58	58	58	59	63	70	64	44	42	43	40	..	..	..	52.2
	Minimum	50	34	33	34	38	34	26	19	21	20	42	48	48	52	41	32	30	27	28	29	30	38	53	38	32	28	23	25	..	..	..	34.0
Farmers	Maximum	57	55	40	53	53	45	35	34	42	51	60	60	63	62	57	48	48	50	60	64	64	68	62	57	48	43	43	43	..	..	..	52.3
	Minimum	40	39	34	34	45	35	28	20	21	17	28	37	31	57	32	32	18	23	27	26	32	44	48	38	35	32	17	21	..	..	..	31.5
Maysville *	Maximum	56	44	38	50	47	37	30	32	40	51	58	57	64	58	50	50	50	52	60	62	63	66	60	44	36	44	40	40	..	..	..	49.2
	Minimum	27	37	33	32	32	35	24	16	18	18	19	39	32	32	34	33	22	22	23	25	23	31	47	41	32	30	21	21	..	..	..	28.5
Middlesboro	Maximum	64	52	40	55	53	50	41	37	43	52	56	63	62	59	56	48	55	62	60	60	57	67	63	55	40	46	48	48	..	..	..	53.3
	Minimum	48	40	34	29	36	32	30	25	15	17	27	47	29	38	43	31	22	21	29	31	23	43	48	40	23	33	23	30	..	..	..	32.0
Mount Sterling *	Maximum	58	58	39	38	48	35	30	29	35	47	56	59	60	58	42	44	39	49	49	55	57	65	60	41	40	40	28	28	..	..	..	46.7
	Minimum	41	44	32	34	36	33	25	17	20	21	21	42	38	45	36	32	24	24	29	30	28	28	47	40	32	28	23	23	..	..	..	31.5
Richmond *	Maximum	58	43	40	56	51	35	32	32	40	51	58	62	61	56	49	48	50	56	59	61	61	69	60	44	34	41	40	39	..	..	..	49.5
	Minimum	42	42	32	33	38	23	26	20	20	22	38	41	41	52	37	31	24	25	32	37	34	47	55	39	32	31	23	24	..	..	..	34.0
Weeksbury	Maximum	63	57	40	60	59	55	45	38	40	55	60	65	66	65	59	46	46	52	63	63	65	64	56	54	50	43	41	50	..	..	..	54.3
	Minimum	53	39	33	35	40	34	27	20	25	19	28	36	34	46	45	34	23	22	27	26	27	44	40	28	34	31	22	20	..	..	..	32.2
Williamsburg *	Maximum	61	54	38	55	57	40	43	28	41	51	67	65	58	62	50	49	52	59	60	61	60	70	58	42	44	45	43	46	..	..	..	52.2
	Minimum	41	44	34	30	26	35	32	26	15	15	19	37	51	37	39	29	22	22	23	25	21	43	52	38	36	33	22	24	..	..	..	31.6

* Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Qu'Appelle
Swift Current
Minnedosa
Kalispell
Missoula
Helena
Havre
Williston
Winnipeg
Bismarck
Moorhead
Duluth
White River
Port Arthur
Sault Ste Marie
Santa Fe
San Antonio
0.5
1
2
4
6
8
10
15

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WEATHER BUREAU
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CLIMATOLOGICAL DATA

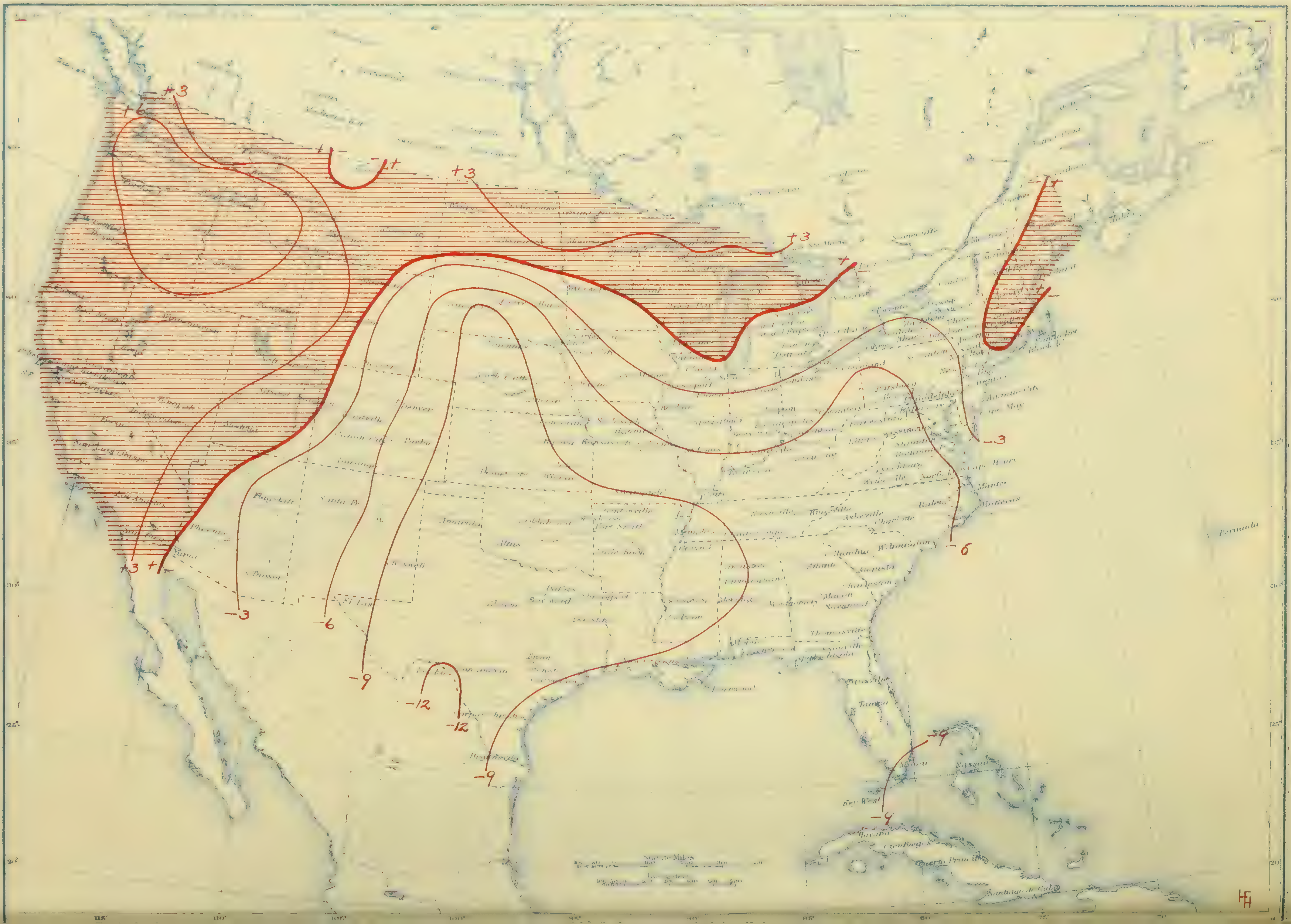
KENTUCKY SECTION

MARCH, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 22, 1915

Departure of the Mean Temperature from the Normal, March, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., March, 1915. No. 3

GENERAL SUMMARY.

The month was the coldest March since State records were established, and also with two exceptions, March, 1889 and 1910, the driest. There were no severe temperature extremes, but daily minimum temperatures were seldom above freezing, while maximum temperatures were unusually low, the maximum for the State being the lowest on record for March. There were no warm periods. Heavy frosts and hard freezes occurred almost every night and vegetation made no appreciable growth, the appearance of the fields and woods at the end of the month being as bleak as in midwinter. The blustery weather characteristic of March was notably absent.

The precipitation for the month averaged less than half the normal amount for March, and was much below normal in all sections. Small grain and pastures began to show the effect of drought, especially in the western part of the State. The dry weather, however, was remarkably favorable for outdoor work. Spring plowing advanced rapidly, many farmers being practically a month ahead with the preparation of their land at the end of March.

PRESSURE.

High pressure areas of great energy were dominant almost continuously during the month. The most important disturbance that passed over the State was a low pressure area of moderate energy that appeared on the west Gulf coast on the 3d and moved northeastward during the 4-6th, causing the only good rains of the month. The other disturbances were generally shallow or passed well to the north or south of the section in their eastward drift.

TEMPERATURE.

The mean temperature for the State, as computed from the records of 36 stations, was 37.8°, which is 8.5° below normal and 4° colder than February, 1915. The deficiency was greatest over the south-central counties, where temperatures averaged 9° to 11° below normal. The mean daily temperatures at all stations were almost continuously below normal, and were remarkably uniform, varying only a few degrees throughout the month. The highest temperature, 65°, which is 6° lower than any other March maximum temperature on record in this state, occurred at Earlington, Hopkinsville and Williamsburg on the 25th. The lowest for the State was 11° at Williamsburg on the 17th.

PRECIPITATION.

The average precipitation for the State, based on the records of 47 stations, was 2.11 inches, which is 2.78 inches less than the normal amount for March. Less than one-third of the normal amount occurred over the western and north-central counties, where from 1 to 2 inches were received. Over the eastern and south-central counties the amounts received ranged between 2 and 4 inches. The total amounts at the various stations ranged between 1.07 inches at Beaver Dam, and 3.70 inches at Alpha. Moderate to heavy rains occurred during the period 4-7th, and light to moderate precipitation, much of which was snow, during the period 15th-22d. There were also light rains in the central and eastern counties on the 26th. Light snow was general on the 7th, and there was a heavy fall of snow in the southern mountain counties on the 16th. During the night of the 21st-22d an unusually heavy snowfall occurred over the southern and east-central counties. In some places this was the heaviest snow of the winter.

WIND.

The total wind movement at Louisville was 8451 miles and at Lexington 6899 miles, the average hourly velocity being 11.4 and 9.3 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 40 miles an hour from the northwest on the 16th, and at Lexington 31 miles an hour from the northeast on the 4th.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 76 per cent. and at 7 p. m. 60 per cent., which is near the normal for March.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month was 57 at Louisville and 48 at Lexington, which is considerably above normal.

MISCELLANEOUS.

A scarcity of water in small streams, and some damage to late planted wheat on account of the cold dry weather, were reported from some places in the central counties. No destructive storms of any character were reported from any station.

Moderate stages prevailed in the streams of the State and good stages in the Ohio River.

ERRATA.—January, 1915: Hopkinsville highest temperature should be 65° on the 16th and total precipitation should be 6.61 inches; Maysville total snowfall should be [illegible].7 inches.

Comparative Data for March

Year.	Temperature. Monthly average	Temperature. Departure from 25 year normal	Temperature. Highest	Temperature. Lowest	Precipitation. Monthly average	Precipitation. Departure from 25 year normal	Precipitation. No. of days with .01 in. or more
1889....	40.5	−5.8	84	18	1.52	−3.37	
1890....	41.2	−5.1	78	4	8.34	+3.45	
1891....	41.8	−4.5	71	9	8.08	+3.19	
1892....	40.6	−5.7	82	7	4.08	−0.81	
1893....	45.0	−1.3	89	5	2.76	−2.13	
1894....	50.8	+4.5	86	10	2.72	−2.17	
1895....	45.0	−1.3	88	15	3.17	−1.72	[illegible]
1896....	41.1	−5.2	80	8	6.16	+1.27	12
1897....	49.6	+3.3	86	20	7.94	+3.05	14
1898....	50.7	+4.4	84	16	7.59	+2.70	1
1899....	43.9	−2.4	80	3	8.10	+3.21	15
1900....	42.8	−3.5	81	3	2.58	−2.31	9
1901....	46.4	+0.1	87	3	3.50	−1.39	10
1902....	47.2	+0.9	82	7	4.44	−0.45	11
1903....	52.5	+6.2	85	19	4.43	−0.46	12
1904....	47.7	+1.4	88	12	6.26	+1.37	12
1905....	52.2	+5.9	86	22	4.45	−0.44	[illegible]
1906....	39.2	−7.1	75	[illegible]	[illegible]	−1.48	16
1907....	54.9	+8.6	92	18	2.28	−2.61	10
1908....	51.8	+5.5	88	19	5.42	+0.53	[illegible]
1909....	44.8	−1.5	74	17	5.14	+0.25	[illegible]
1910....	55.0	+8.7	91	11	0.79	−4.10	[illegible]
1911....	46.0	[illegible]	87	7	2.57	−2.32	[illegible]
1912....	41.3	−5.0	88	10	6.22	+1.33	15
1913....	46.5	+0.2	85	9	7.22	+2.33	10
1914....	41.8	−4.5	78	2	3.62	−1.27	12
1915....	37.8	−8.5	65	11	2.11	−2.78	8

Climatological data for March, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	38.9	−8.6	60	25	23	2†	32	1.07	−3.27	0.94	T.	3	10	13	8	N	W. T. Austin.
Blandville	Ballard	445	33	40.6	−6.5	64	25	25	22	27	1.35	−3.52	0.97	2.0	8	8	10	13	NW	E. W. Horr.
Calhoun	McLean	393	11	......	......	61	14	......	......	......	1.25	−3.37	0.90	T.	6	10	6	15	NW	W. A. Taylor.
Earlington	Hopkins	370	24	38.6	−8.9	65	25	20	31	33	1.35	−4.16	1.17	1.0	3	12	0	19	N	Brick Southworth.
Hopkinsville	Christian	524	18	41.0	−9.6	65	25	24	2	34	1.53	−3.44	1.20	2.8	6	15	0	16	W	W. F. Randle.
Marion	Crittenden	571	17	39.1	−9.5	62	25	24	1†	27	1.40	−3.39	0.80	1.7	4	12	5	14	N	B. C. Paris.
Owensboro	Daviess	479	17	38.8	−9.8	58	24	25	1	26	1.30	−3.54	0.92	1.5	6	7	9	15	NW	Henry S. Berry.
Paducah	McCracken	341	26	......	......	......	......	......	......	......	1.26	−3.44	1.20	T.	2	......	......	......	......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	39.6	−11.1	63	25	23	2†	31	3.70	−2.47	0.90	11.5	8	14	0	17	W	W. W. Hicks.
Anchorage	Jefferson	700	13	36.2	−8.9	59	25	18	1†	36	1.34	−2.64	0.94	0.5	4	16	2	13	NW	C. E. Barret.
Bardstown	Nelson	637	17	38.6	−9.0	61	25	21	1†	34	2.30	−2.72	1.60	2.3	6	11	5	15	N	Chas. M. Talbott.
Bowling Green	Warren	500	25	39.8	−8.8	64	25	20	2	34	1.78	−3.35	1.18	3.6	7	15	5	11	N	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	......	2.94	−2.33	0.77	4.6	9	......	......	......	......	K. W. Massey.
Cloverport	Breckenridge	375	1	......	......	......	......	......	......	......	1.28	......	0.96	0.8	7	......	......	......	NW	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Lee Ray.
Eubank	Pulaski	1177	20	35.7	−10.6	60	25	17	2	33	2.18	−3.07	0.92	3.1	6	8^{c}	6^{c}	14^{c}	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	39.2	−7.0	62	25	21	1†	34	1.50	−3.77	0.97	0.2	8	14	6	11	N	Geo. L. Barnes
Franklin	Simpson	691	20	40.5	−9.6	64	25	24	31	28	2.12	−2.63	0.66	2.0	9	5	14	12	NW	J. E. Newman.
Greensburg	Green	581	22	38.6	−8.2	64	25	19	2	34	2.02	−3.48	0.93	5.5	11	7^{a}	2^{a}	21^{a}	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	......	......	......	......	......	......	......	1.81	−2.55	1.00	T.	11	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	17	38.6	−9.1	59	25	24	1†	26	1.45	−3.45	0.85	0.2	5	15	5	11	W	W. J. Piggott.
Leitchfield	Grayson	635	19	37.6	−8.4	63	25	21	2	31	1.51	−3.28	1.09	2.5	6	12	7	12	NW	John E. Stone.
Lexington	Fayette	989	30	35.8	−7.6	56	25	21	1	22	1.49	−3.23	1.07	0.7	10	10	6	15	NW	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	37.4	−10.7	63	25	18	2	35	2.65	−1.97	1.02	1.0	16	13	2	16	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	38.6	−6.7	57	25	25	1	24	1.31	−3.01	1.02	T.	9	10	6	15	W	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	38.2	......	59	25	21	1	31	1.48	......	0.89	2.2	7	9	9	13	NW	Wm. I. Hunt.
St. John	Hardin	777	18	37.2	−7.9	61	25	21	2	37	1.39	−3.60	1.00	T.	6	12	3	16	......	Sisters of Loretto.
Scott	Kenton	900	17	36.2	−8.1	56	14	18	30	31	1.74	−2.77	1.18	4.4	6	11	5	15	N	E. B. Wilson.
Shelby City	Boyle	1087	20	37.6	−8.5	60	25	20	1	31	2.41	−2.70	1.17	......	8	15	4	12	NW	H. F. Ewing.
Shelbyville	Shelby	759	25	35.4	−9.9	56	25	20	1	29	1.86	−3.05	1.05	0.8	8	14	3	14	NE	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	36.9	−10.7	60	25	20	2†	32	1.91	−2.65	1.35	1.2	9	9	6	16	NW	E. D. Bourne.
Williamstown	Grant	943	12	35.2	−9.7	60	14	16	1	34	1.82	−2.52	0.98	1.8	8	17	2	12	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	36.6	−9.6	62	14†	15	2	43	3.19	−1.87	0.84	13.4	8	4	13	14	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	35.9	−11.4	61	25	19	17	36	2.60	−2.33	1.21	8.7	8	17	2	12	NW	C. F. Rumold.
Catlettsburg	Boyd	534	26	......	......	......	......	......	......	......	2.46	−1.11	0.98	T.	8	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	......	......	......	......	......	......	......	2.11	−2.25	0.95	T.	8	12	9	10	SW	J. V. Oldham.
Farmers	Rowan	668	8	36.5	−8.4	60	25	14	31	39	2.48	−2.08	1.19	......	6	17	3	11	......	Lee Craycraft.
Hazard	Perry	......	1	......	......	......	......	......	......	......	3.14	......	0.70	11.7	8	......	......	......	......	Kelly E. Watts.
Jackson	Breathitt	......	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
London	Laurel	1190	0	......	......	......	......	......	......	......	3.81	......	1.40	9.2	10	10	2	19	NE	C. R. Lee.
Louisa	Lawrence	584	10	......	......	......	......	......	......	......	2.66	−1.07	0.91	......	6	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	3	......	......	......	......	......	......	......	3.58	......	1.07	22.0	7	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	36.1	−8.0	58	14†	18	1†	40	2.29	−2.45	1.00	0.3	11	17	4	10	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	39.7	−8.8	63	25	18	2	39	2.14	−3.34	0.85	......	9	19	6	6	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	36.2	−7.9	57	25	20	1	28	2.66	−3.27	1.35	2.0	8	15	6	10	N	H. Clay McKee.
Pikeville	Pike	634	8	......	......	......	......	......	......	......	2.49	−1.72	0.54	11.0	9	......	......	......	......	I. M. Williams.
Richmond	Madison	926	22	37.8	−7.5	61	25	21	1	30	2.57	−2.15	1.32	1.4	10	14	3	14	......	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	37.2	......	61	25	17	18	35	3.50	......	1.25	5.0	9	17	5	9	S	O. A. Lund.
Williamsburg	Whitley	939	18	37.8	−9.0	65	25	11	17	37	2.88	−2.04	0.85	9.0	12	15	4	12	W	N. C. Jones.
State averages and extremes				37.8	......	65	25	11	17	43	2.11	......	1.60	3.5	8	12	5	14	NW	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for March, 1915.

Stations		Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G					.91		T.									T.			[illegible]		T	[illegible]										[illegible]
Blandville	M				.88	.09		.02								T	.03		.01		[illegible]	.02	T	T									[illegible]
Calhoun	G.				.14	.90	T	.03	T								T		.01		T	.12	.05						T				[illegible]
Farmington	G					1.17		T.												.08		T.	.10										[illegible]
Hopkinsville	C				.55	.65										.05	T					.05	.15								.08		[illegible]
Marion					.43	.80		T.									T.				T.	.10	.07								T		[illegible]
Owensboro	O.					.92	T	.07									T.		.03	.17	T.	.05	.06										[illegible]
Paducah	O.					1.20		T.									T.					T.	T.								T	[illegible]	[illegible]
Central Division.																																	
Alpha	C.				.80	.15		T.								.70	.40		.90		.05		.40				T.				.30		[illegible]
Anchorage	O.				T.	.94	T	.05											T.	.30	.05	T	T				T.						1.34
Bardstown	S					1.60	.20	.03													.20	T.	.08	T			.19			T.			2.30
Bowling Green	G				1.18	T.		.03	.03								.10			.10			.30				T.					[illegible]	1.78
Burnside	C.					.77	.26	T.	T.	T.							.60	.35		.35	.02	.12	.35	T			.12				T.		2.94
Cloverport	O.					.96	.02	.05	.03								T.	T.		.15	.02	T.	.05	T.									1.28
Edmonton	G																																
Eubank	C.					.92	.20										.56	.05		.20			.25										[illegible]
Frankfort	K					.97	.21	.05	T.							.03	.02			.14	.02	T.	T.	T.	T.		.06	T.		T.			1.50
Franklin	G.				.52	.66		T.	T.							.28	.10		T.	.12	T.	.03	.12				.19				.10		2.12
Greensburg	G					.93	.13	.02	.03							.03	.20	.09		.14	.02	.40	T.	T.			.03						2.02
High Bridge	K.					1.00	.25	.01	.02								.02	.14		.08	.05	.10	.01				.13						1.81
Irvington	O					.85	.03	.07									T.		T	.30	.20	T.	T.				T.						1.45
Leitchfield	G				*	1.09		.05									T.		.17			*	.20										1.51
Lexington ***	K.				.34	.74	T	.04								.03	.07		.02	.08	.02	T.	T.			.02	.13		T.				1.49
Loretto	S	1.01				1.02	.04	.04	.02	.02			.01				.04	.01	T.	.06	.13	.03	.11	.01	T.		.08	.02					2.65
Louisville***	O				.61	.41	.01	.01							.01	T	T.		.15	.06	T.	T.	T			.01	.04		T.				1.31
Do (Cherokee Park)	O				T.	.89	T	.14								.05			*	.24	.06	T.	T.				.10		T.				1.48
St John	S.					1.00	.07	.04												.18	.05		.05	T.			T.						1.39
Scott	L					1.18	.07	.02	T							.05			T	.39	T.		T.	T.		T.	.03						1.74
Shelby City	K					1.17	.06									.10	.40			.10	.09	T.	.30				.19						2.41
Shelbyville	S					1.05	.20	.04	.02							T.				.31	.08	T.	.02				.14	T.					1.86
Taylorsville	S					1.35	.02	.04								.08			.01	.23	.10		.01	T.			.07			T			1.91
Williamstown	L					.98	.32	.02	.01							.05				.24	.05	T.					.15						1.82
Eastern Division.																																	
Beattyville	K				.84	.49	T	T.								T.	.58	.63		.14	T	T.	.28	.01			.22						3.19
Berea	K				*	1.21	.04									.22	.42			T.	T	.26	.33	T.			.12						2.60
Catlettsburg	B				.98	.54	.06	T.									.08	.36		.18	.04						.22	T.					2.46
Falmouth ‡	L				.95	.43	.02	T.								.08				.43	.04	T.		T.			.14	T.		.02			2.11
Farmers	L				1.19	.13											.50			.10	.25						.31						2.48
Hazard	K.				.70	.10		.05									.60	.60		.30			.59				.20						3.14
Jackson	K.																																
London	C				.60	.40	T										.40	.57		.26	T	.02	1.40	.02			.12					.02	3.81
Louisa	B				.91	.43											.27	.44		.22							.39						2.66
Manchester	K				.51	.29											.67	.83			.08		1.07					.13					3.58
Maysville	O				1.00	.60	.02	T.								.02	.02			.26	.05	.07		T.			.20	.03		.02			2.29
Middlesboro	C.				.85	.10	T.										.60	.12		.09	.04	.05	.09								.20		2.14
Mount Sterling	L				1.35	.31	.05	T.								T.	T.	.48		.15	.04	.03					.25						2.66
Pikeville	B.				.35		T.	T.	T.								.54	.52		.12	.04	.16	.50	.04			.22	T.					2.49
Richmond	K.				1.32	.25	.03	.02								T.	.47	.04		.32	T.	.02	.06	.04			T						2.57
Weeksbury	B.				.90		.10	.05								.10	1.25			.20	.25		.45				.20						3.50
Williamsburg	C.				.48	.25	.03	.02									.85	.50		.14		.10	.23	.03			.05					.20	2.88

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

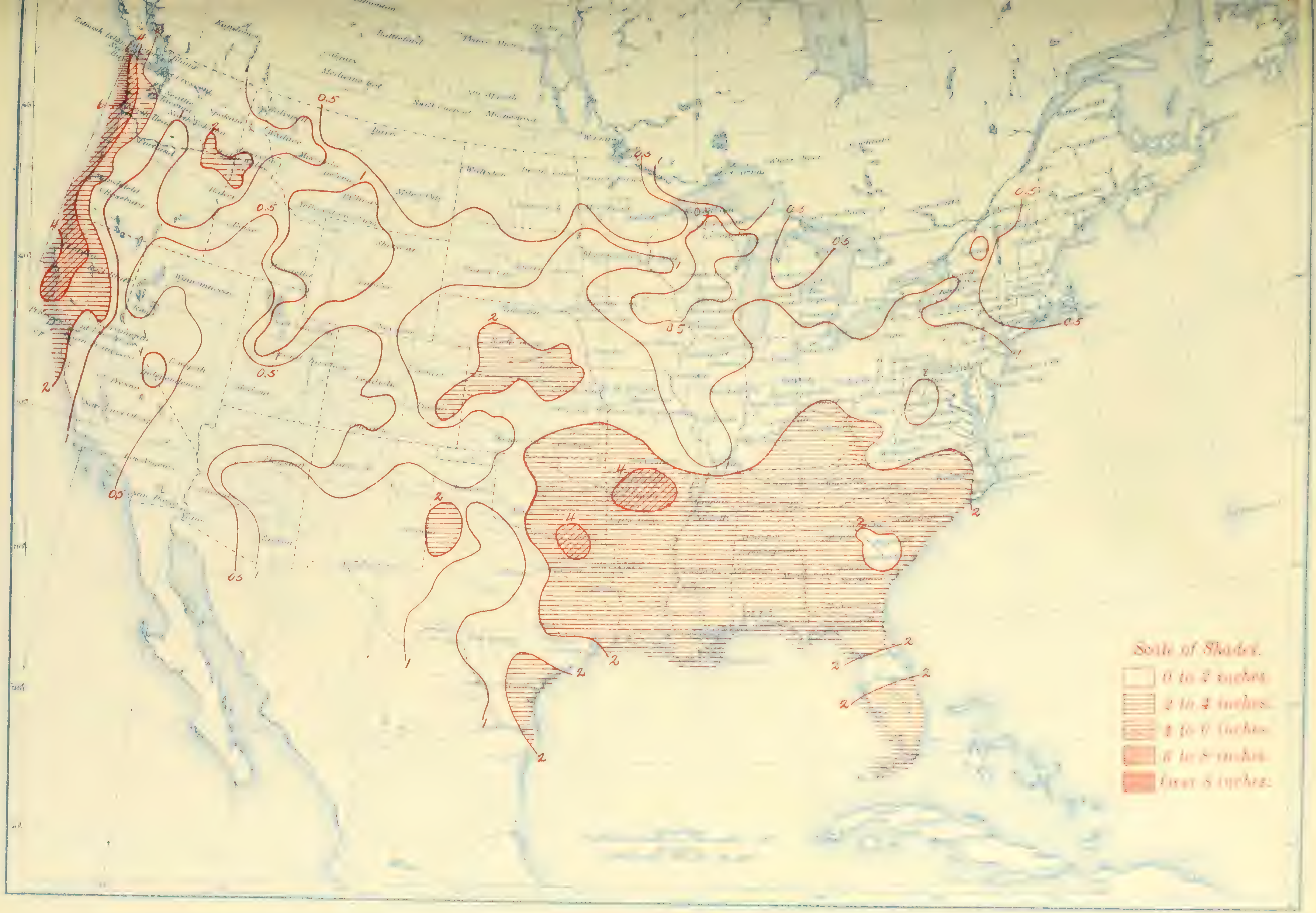
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for March, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	45	52	50	45	51	40	35	45	56	52	45	55	55	58	51	44	43	51	43	42	34	40	44	55	60	43	50	52	51	39	52	47.7
	Minimum	24	23	25	33	33	35	28	32	25	26	31	25	30	26	40	34	27	33	36	31	28	27	32	36	37	40	29	25	27	32	23	30.1
Blandville	Maximum	46	52	53	43	46	42	38	45	49	53	44	53	56	60	54	42	49	51	44	42	39	40	43	56	64	54	50	59	50	44	51	48.8
	Minimum	26	30	33	35	37	32	31	34	29	33	29	29	38	38	37	33	30	36	32	33	29	25	33	32	42	37	31	32	30	30	26	32.3
Calhoun	Maximum	47	43	51	48	50	42	36	48	54	53	49	56	51	61	55	45	49	52	46	41	39	39	46	55	60	55	51	58	52	46	53	49.4
	Minimum	23	25	28	32	35	32	33	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32	26	......
Earlington §§	Maximum	46	53	34	47	50	41	35	43	52	52	46	52	56	60	49	44	48	51	42	41	35	42	43	55	65	42	50	59	52	39	52	47.6
	Minimum	24	23	33	25	37	34	30	31	25	27	30	23	26	27	37	34	27	29	35	29	29	26	30	34	39	39	29	27	26	34	20	29.6
Hopkinsville	Maximum	49	54	53	45	50	45	41	43	53	55	59	56	57	58	53	44	50	52	48	43	39	43	43	52	65	61	52	60	64	48	53	51.2
	Minimum	25	24	29	33	34	33	30	33	28	32	29	28	32	28	39	33	27	32	35	31	30	25	33	29	39	39	31	26	30	31	25	30.7
Marion	Maximum	43	51	50	40	48	40	35	41	48	50	45	51	53	55	53	42	46	50	45	41	36	38	42	53	62	53	47	57	53	43	49	47.1
	Minimum	24	29	29	32	24	32	29	32	28	32	29	30	34	37	37	33	27	34	34	31	28	24	31	32	35	37	29	33	28	33	27	31.1
Owensboro §§	Maximum	49	48	41	46	41	38	45	49	49	42	52	52	57	50	44	45	45	42	40	36	38	47	56	58	47	47	56	51	42	49	40	46.5
	Minimum	25	26	30	33	34	32	29	33	29	32	29	28	33	32	38	34	26	31	34	32	29	28	32	35	40	36	30	29	28	31	27	31.1
Central Division																																	
Alpha	Maximum	47	53	53	44	52	45	42	45	50	55	48	56	56	58	49	45	42	48	42	38	40	40	40	44	63	44	50	54	53	36	47	47.7
	Minimum	25	23	25	32	45	36	33	32	25	27	31	28	25	27	45	33	29	29	38	34	32	29	32	31	43	42	33	25	31	34	23	31.5
Anchorage	Maximum	44	46	46	39	52	41	36	42	51	51	47	51	51	58	50	46	45	41	40	40	39	38	45	53	59	45	47	53	48	37	50	46.2
	Minimum	18	20	21	27	34	30	28	32	20	22	26	20	30	22	35	34	27	24	33	30	24	26	30	25	35	31	28	23	20	23	18	26.3
Bardstown §§	Maximum	49	53	51	43	55	38	37	49	52	55	50	55	56	58	55	45	49	47	38	40	41	40	48	55	61	42	50	55	53	39	54	48.8
	Minimum	21	21	24	29	30	35	28	30	26	25	28	28	26	24	34	35	26	27	31	32	29	28	30	28	32	40	28	25	27	27	24	28.3
Bowling Green §§	Maximum	49	54	55	45	51	47	42	46	54	56	49	58	59	60	49	40	50	51	44	44	45	40	48	60	64	46	49	61	56	48	55	50.8
	Minimum	26	20	24	29	34	32	29	27	24	27	28	24	28	28	31	32	24	29	34	30	24	25	29	30	34	40	33	32	30	31	22	28.7
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Eubank §§	Maximum	44	49	47	44	48	34	..	..	45	53	46	48	54	..	51	38	43	46	38	44	42	38	39	48	60	47	45	53	50	45	49	^{c}46.0
	Minimum	21	17	18	27	30	34	29	..	..	20	23	21	21	21	..	31	24	24	26	32	24	27	28	24	30	35	26	22	27	27	23	^{c}25.4
Frankfort	Maximum	43	50	50	47	54	55	42	45	51	52	53	51	52	58	58	52	49	47	47	44	45	46	47	52	62	59	49	55	55	49	48	50.5
	Minimum	21	23	22	26	35	33	29	30	24	24	27	27	23	24	34	34	26	25	35	34	29	28	31	29	37	31	28	24	25	24	21	27.8
Franklin	Maximum	47	54	51	42	51	44	40	42	47	56	47	52	56	60	55	42	48	51	45	45	38	43	42	54	64	61	49	58	57	46	50	49.6
	Minimum	25	26	30	36	37	33	29	30	28	31	30	28	32	32	40	33	27	32	36	32	31	27	32	32	39	37	31	31	33	30	24	31.4
Greensburg §§	Maximum	45	52	49	44	53	42	41	47	48	54	47	52	55	58	51	42	48	51	41	45	41	41	45	53	64	43	43	57	54	..	52	^{a}48.6
	Minimum	24	19	23	27	33	35	30	30	25	25	29	23	29	24	30	34	27	25	31	34	29	27	30	25	30	41	29	24	29	38	..	^{a}28.6
Irvington	Maximum	44	50	45	46	52	42	36	45	47	49	43	49	50	55	50	45	45	46	42	42	40	38	47	53	59	50	47	53	50	40	48	46.7
	Minimum	24	24	29	29	37	32	30	31	27	29	29	27	27	32	42	34	29	30	34	33	29	26	33	31	41	35	28	28	28	28	26	30.4
Leitchfield	Maximum	43	51	47	40	50	38	35	43	48	51	45	50	51	57	50	45	45	49	40	43	36	39	44	53	63	45	47	56	50	40	49	46.5
	Minimum	23	21	26	30	34	32	27	29	26	29	29	25	29	27	38	33	25	27	35	32	26	26	31	27	35	35	28	25	26	29	24	28.7
Lexington	Maximum	39	47	41	40	47	39	33	41	44	48	41	45	47	54	49	41	40	42	38	40	39	38	42	48	56	43	41	50	46	36	45	43.2
	Minimum	21	28	28	25	34	31	26	28	24	32	27	28	27	32	37	30	24	28	33	31	29	28	30	30	36	29	27	29	25	22	24	28.5
Loretto	Maximum	45	51	47	41	52	49	36	45	48	52	48	50	54	56	54	45	45	47	41	41	40	38	43	51	63	53	46	55	50	44	49	47.7
	Minimum	21	18	20	29	34	34	28	30	22	22	27	25	19	21	33	33	25	27	35	32	28	25	31	28	37	34	28	22	24	28	20	27.1
Louisville	Maximum	43	48	45	40	51	38	36	45	49	51	45	51	51	57	49	45	45	43	41	41	39	38	44	51	57	45	46	50	47	39	49	45.8
	Minimum	25	31	31	29	35	31	29	33	29	32	29	32	31	33	37	33	28	33	35	33	29	30	33	33	43	30	29	32	27	26	28	31.3
Do. Cherokee Park	Maximum	42	49	47	44	54	51	37	43	48	51	48	50	50	56	55	47	44	44	44	42	41	38	45	54	59	54	46	53	50	46	50	47.8
	Minimum	21	25	25	28	34	32	28	31	24	26	29	27	24	25	39	34	25	29	35	32	28	29	32	28	39	32	27	28	24	24	24	28.6
St. John §§	Maximum	46	54	46	42	49	37	35	45	47	54	47	49	51	59	45	44	48	46	38	46	37	39	46	52	61	40	56	55	52	37	50	46.9
	Minimum	22	21	25	27	29	34	27	29	25	27	28	23	26	22	31	35	24	26	31	32	26	27	29	25	33	39	27	25	24	27	22	27.4
Scott	Maximum	43	47	39	37	47	45	37	42	48	50	43	49	50	56	49	44	45	40	39	42	40	41	45	51	52	45	45	49	45	49	47	45.2
	Minimum	19	26	24	23	34	31	28	27	24	27	28	26	23	26	36	33	23	26	32	32	31	24	31	34	37	27	23	26	19	18	22	27.1
Shelby City	Maximum	44	49	46	42	49	50	38	45	47	50	48	50	52	57	54	44	44	47	42	41	40	37	42	51	60	54	47	53	53	45	50	47.5
	Minimum	20	22	23	28	34	34	28	30	23	26	28	28	23	26	33	32	25	27	35	33	27	26	30	28	32	32	27	24	27	26	24	27.8
Shelbyville §§	Maximum	40	45	43	41	46	35	33	42	44	47	44	47	47	54	51	41	46	39	38	41	48	36	43	48	56	40	44	50	46	35	46	33.7
	Minimum	20	22	22	25	27	33	28	28	22	25	28	26	23	25	36	35	25	27	31	32	26	28	30	27	32	35	27	25	24	23	21	27.0
Taylorsville	Maximum	42	50	44	40	50	45	35	45	45	50	46	47	49	54	50	45	42	44	41	41	41	38	45	52	60	52	44	53	48	41	47	46.0
	Minimum	21	20	21	28	34	32	29	32	22	23	29	27	24	22	34	35	26	24	36	32	28	28	32	27	33	32	29	33	24	25	20	27.8
Williamstown §§	Maximum	46	47	42	39	48	36	37	45	40	42	47	48	54	60	50	43	46	40	37	43	44	41	41	50	56	42	47	49	47	42	49	45.1
	Minimum	16	20	24	21	26	33	26	26	20	24	27	24	22	26	37	32	22	24	30	30	25	24	27	34	34	29	23	25	19	17	19	25.4
Eastern Division																																	
Beattyville §§	Maximum	48	53	52	45	48	42	37	47	55	54	46	55	58	62	56	37	43	50	40	47	44	38	45	52	62	41	49	59	54	40	54	48.8
	Minimum	17	15	20	22	29	37	31	32	19	20	21	22	18	19	23	33	17	19	22	32	32	30	27	30	24	29	26	18	29	27	19	24.5
Berea	Maximum	44	42	38	40	41	42	38	43	46	53	45	50	54	57	44	40	45	45	42	38	45	38	41	50	61	48	46	54	52	40	48	45.5
	Minimum	20	20	21	21	26	28	28	30	23	24	28	25	21	21	29	32	19	21	35	33	29	27	30	31	38	32	26	23	28	25	20	26.3
Farmers	Maximum	44	48	48	40	47	47	39	44	42	52	51	50	53	56	50	43	42	49	44	44	49	43	44	51	60	56	56	53	49	48	50	48.1
	Minimum	16	16	22	25	36	37	30	32	18	20	22	15	18	18	26	32	20	20	34	32	32	28	31	35	21	34	22	18	27	22	14	24.9
Maysville §§	Maximum	44	52	46	42	48	39	39	44	49	54	45	49	55	58	56	44	44	45	39	44	47	43	44	52	58	43	47	52	49	41	49	47.1
	Minimum	18	18	23	24	23	36	29	29	21	21	23	28	18	18	29	34	22	21	23	32	31	26	27	32	32	35	23	22	22	19	18	25.1
Middlesboro	Maximum	47	51	55	54	53	51	44	44	50	55	52	54	60	58	57	48	41	49	48	42	43	40	40	52	63	61	50	58	56	53	51	51.0
	Minimum	35	18	23	25	38	35	31	32	24	23	25	25	21	25	25	32	25	24	35	34	32	27	30	27	26	38	33	22	31	32	28	28.4
Mount Sterling §§	Maximum	40	47	43	40	48	37	39	42	44	48	43	45	49	53	54	39	42	47	39	40	42	40	46	50	57	38	44	50	47	38	46	44.4
	Minimum	20	21	26	25	34	33	26	29	23	25	25	28	26	25	34	38	24	26	34	34	31	29	30	31	32	37	26	26	25	23	23	28.0
Richmond §§	Maximum	44	49	49	43	48	38	35	46	48	52	45	51	54	57	53	41	44	44	39	39	44	44	42	49	61	45	46	53	49	38	51	46.5
	Minimum	21	25	25	27	38	35	29	30	23	32	28	27	24	27	38	32	25	30	34	34	30	28	28	30	35	38	26	29	26	25	23	29.1
Weeksbury	Maximum	43	51	45	50	52	46	40	41	45	53	49	49	54	56	58	45	36	46	44	39	43	38	41	50	61	53	44	40	56	47	50	47.3
	Minimum	21	20	25	21	37	40	30	31	26	24	27	28	21	22	23	32	18	17	31	33	32	28	29	34	29	32	28	26	24	28	24	27.1
Williamsburg §§	Maximum	43	51	52	52	53	53	48	45	48	56	48	53	58	55	58	35	41	50	47	45	43	40	40	50	65	45	47	58	55	43	51	49.3
	Minimum	27	18	21	26	31	37	33	31	22	24	26	22	21	22	25	32	11	18	26	31	29	28	28	25	28	31	31	23	34	24	23	26.4

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
0.5
1
2
4

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CLIMATOLOGICAL DATA

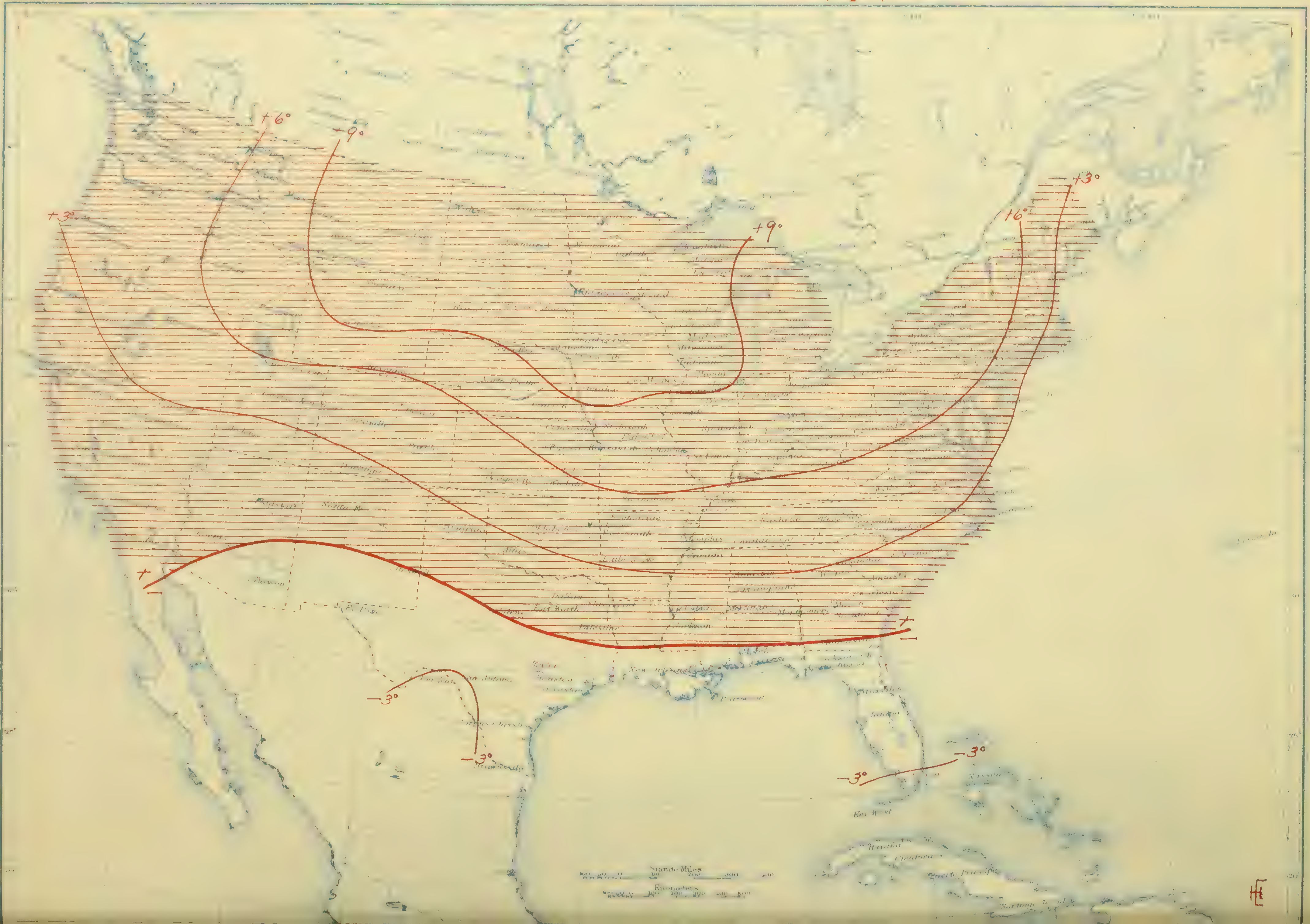
KENTUCKY SECTION

APRIL, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 22, 1915

Departure of the Mean Temperature from the Normal, April, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XX. LOUISVILLE, KY., APRIL, 1915. No. 4

GENERAL SUMMARY.

The unseasonably cold weather that characterized the month of March, 1915, continued during the first four days of April, when unusually low temperatures were registered in all parts of the State, minimum temperatures ranging between 17° and 30°. During this period killing frosts occurred generally, the last for the season being reported from most stations in the central and western counties on the 4th. Freezing temperatures and killing frosts occurred again at many stations in the eastern and northern counties during the period 13-15th. On account of the dormant condition of vegetation, due to the persistent cold weather, practically no damage resulted from these low temperatures and prospects for fruit were excellent at the end of the month.

The latter half of the month was unusually warm, and temperatures in the 90's occurred at many stations on several days, while the month averaged the warmest on record for the State, except April, 1896, when the mean temperature was 63.6°.

The month's precipitation averaged less than one inch, the least for April since the beginning of State averages, and the ground became too dry to plow before the end of the month. Spring plowing had been generally completed, however, before this condition was reached, but planting and germination of seeds were delayed. Wheat, rye, oats, pastures and tobacco beds suffered severely from drought, and there was some complaint of shortage of stock water.

PRESSURE.

High pressure controlled weather conditions during most of the month. The only disturbances that produced precipitation of consequence were the low pressure areas that passed to the northward of the State on the 10-11th and across the plain States from the southwest on the 21st-23d. The warm, dry weather of the latter half of the month was largely due to the persistence of high pressure over the southern and southeastern States.

TEMPERATURE.

The mean temperature for the State, as determined from the records of 36 stations, was 60.1°, which is 4.2° above the April normal. The excess was greatest over the northern and western counties where it ranged between 5° and 8°. The cool periods were the 1st-4th and 12-15th, and the warm periods 6-10th and 18-30th. The highest temperature, 96°, registered at Beattyville on the 25th, was equaled in April, 1896, 1899 and 1909, but has not been exceeded since State records were established in 1889. The lowest temperature for the State, 17° on the 4th, also at Beattyville, ranks among the low April minimum temperatures of the past 27 years.

PRECIPITATION.

The average precipitation for the State, computed from the records of 47 stations, was 0.96 inch, which is 3.11 inches less than the normal. Over the south-central and northwestern counties the amount received ranged between 1.0 and 1.8 inches, while over the rest of the State they were generally less than 1.0 inch, and in some of the north-central and south-eastern counties only about one-half inch. The total amounts for the month at the various stations ranged between 0.50 inch at Williamsburg and 1.84 inches at Catlettsburg. There were only two periods, the 9-11th and 21st-23d, when good showers occurred generally over the State. A trace of snow was reported from two stations in the western part of the State on the 1st and 2d.

WIND.

The total wind movement at Louisville was 8115 miles and at Lexington 7336 miles, the average hourly velocity being 11.3 and 10.2 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 48 miles and at Lexington 40 miles, from the southwest on the 10th at both stations.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 64 per cent. and at 7 p. m. 53 per cent., which is considerably below normal for April.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month was 76 at Louisville and 73 at Lexington. At the Louisville station this is the greatest on record for April.

MISCELLANEOUS.

Destructive forest fires were reported from Whitley, McCreary, Pulaski and Edmonson Counties on the 9th and 10th; and from Warren, Hart and the eastern mountain counties on the 20th and 21st, with much damage to fences, isolated buildings and timber over extensive areas.

April 9.—Ed Johnson, a farmer, was killed by lightning near Paducah.

April 21.—A severe local storm destroyed a barn and other outbuildings and damaged telephone communications over a small area near Bridgeport, Franklin County.

April 23.—Lightning struck a stock barn at Pageville, Barren County, killing several head of hogs.

Low stages prevailed in the streams of the State and in the Ohio River throughout the month.

Comparative Data for April

Year.	Temperature.				Precipitation.		
	Monthly average	Departure from 25-year normal	Highest.	Lowest.	Monthly average	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	57.0	+1.1	89	24	1.61	−2.46	..
1890	57.0	+1.1	92	28	4.04	−0.03	..
1891	58.0	+2.1	92	21	2.52	−1.55	..
1892	56.0	+0.1	88	22	7.12	+3.05	..
1893	58.0	+2.1	94	21	6.99	+2.92	..
1894	56.0	+0.1	94	23	3.54	−0.53	..
1895	57.2	+1.3	94	22	3.18	−0.89	9
1896	63.6	+7.7	96	24	1.65	−2.42	6
1897	55.5	−0.4	90	25	6.03	+1.96	11
1898	52.4	−3.5	86	19	3.38	−0.69	9
1899	57.2	+1.3	96	20	3.16	−0.91	9
1900	56.2	+0.3	90	15	2.15	−1.92	8
1901	50.9	−5.0	91	23	4.01	−0.06	10
1902	54.2	−1.7	93	22	2.65	−1.42	9
1903	55.4	−0.5	90	22	4.43	+0.36	12
1904	50.8	−5.1	85	16	2.83	−1.24	11
1905	56.7	+0.8	91	23	3.00	−1.07	9
1906	59.5	+3.6	94	23	1.40	−2.67	6
1907	48.2	−7.7	87	19	2.78	−1.29	11
1908	59.8	+3.9	89	23	6.56	+2.49	14
1909	56.1	+0.2	96	21	5.98	+1.91	10
1910	55.4	−0.5	88	23	5.14	+1.07	14
1911	53.8	−2.1	90	20	7.06	+2.99	14
1912	58.4	+2.5	87	25	7.90	+3.83	12
1913	55.3	−0.6	89	27	2.73	−1.34	10
1914	55.7	−0.2	91	13	3.62	−0.45	10
1915	60.1	+4.2	96	17	0.96	−3.11	5

Climatological data for April, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	61.1	+ 6.3	90	25	24	4	46	1.48	−3.14	0.50	0	4	18	10	2	S	W. T. Austin.
Blandville	Ballard	445	33	62.9	+ 5.7	86	28	29	1	33	1.24	−2.95	0.82	T.	4	19	6	5	SW	E. W. Horr.
Calhoun	McLean	437	11	62.6	+ 3.7	91	25	25	4	45	0.95	−3.89	0.47	T.	4	12	15	3	SW	W. A. Taylor.
Earlington	Hopkins	420	24	62.0	+ 4.8	93	25	22	1	49	0.84	−3.48	0.45	0	4	24	0	6	S	Brick Southworth.
Hopkinsville	Christian	524	18	61.3	+ 4.9	90	25†	25	4	46	0.70	−3.55	0.30	0	3	25	1	4	E	W. F. Randle.
Marion	Crittenden	571	17	63.0	+ 6.1	88	25†	25	1	37	0.80	−3.10	0.50	0	2	17	8	5	N	B. C. Paris.
Owensboro	Daviess	479	17	61.2	+ 6.5	87	25†	27	4	42	0.58	−3.75	0.21	0	3	13	6	11	SE	Henry S. Berry.
Paducah	McCracken	341	26								0.76	−3.29	0.38	0	4					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	61.2	+ 3.9	86	25	24	4	39	1.25	−4.02	1.15	0	2	25	4	1	S	W. W. Hicks.
Anchorage	Jefferson	700	13	59.2	+ 5.8	90	25	20	1	44	0.75	−3.23	0.48	0	4	22	4	4	SW	C. E. Barret.
Bardstown	Nelson	637	17	61.8	+ 7.4	94	26†	22	2	44	0.73	−3.15	0.25	0	4	17	7	6	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	62.2	+ 4.3	92	25	25	1	46	1.06	−2.71	0.75	0	5	22	5	3	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								0.94	−3.01	0.36	0	5					K. W. Massey.
Cloverport	Breckenridge	375	1								0.61		0.24	0	5					W. A. Cockerill.
Edmonton	Metcalfe	600	23																	Miss Lee Ray.
Eubank	Pulaski	1177	20	57.8	+ 4.0	89	25†	19	4	43	1.32	−2.73	0.70	0	4	15	5	10	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	60.2	+ 5.1	91	26	21	2†	43	0.80	−2.37	0.42	0	4	19	5	6	S	Geo. L. Barnes
Franklin	Simpson	691	20	63.0	+ 3.9	90	29	29	4	38	0.99	−3.62	0.60	0	5	9	16	5	NW	J. E. Newman.
Greensburg	Green	581	22	60.3	+ 5.3	91	25	22	1†	47	1.04	−2.62	0.48	0	6	13	8	9	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								0.54	−3.71	0.27	0	4					Miss Lulu Wood.
Irvington	Breckenridge	646	17	60.3	+ 5.2	86	24†	26	1	35	0.78	−3.53	0.33	0	4	20	7	3	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	60.0	+ 5.0	89	25	23	1†	43	0.59	−3.73	0.20	0	4	15	12	3	SW	John E. Stone.
Lexington	Fayette	989	30	59.2	+ 5.5	88	25	26	1	32	0.65	−2.69	0.32	0	6	15	12	3	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	59.5	+ 4.6	88	25†	19	4	47	0.62	−3.09	0.23	0	8	16	7	7		Loretto Academy.
LOUISVILLE	Jefferson	525	42	61.6	+ 5.4	89	26	30	1	32	1.02	−3.05	0.63	0	6	15	8	7	S	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	60.4		88	26	24	4	43	1.13		0.53	0	7	11	14	5	SW	Wm. I. Hunt.
St. John	Hardin	777	18	58.9	+ 4.3	90	25†	21	4	45	0.53	−3.46	0.20	0	1	18	3	9		Sisters of Loretto.
Scott	Kenton	900	17	59.0	+ 6.3	89	20†	21	1	41	1.22	−2.01	0.34	0	9	14	10	6	N	E. B. Wilson.
Shelby City	Boyle	1087	20	59.8	+ 5.3	90	24†	23	4	42	0.86	−2.85	0.42	0	4	23	7	0	SW	H. F. Ewing.
Shelbyville	Shelby	825	25	57.2	+ 2.3	86	26	22	1†	41	1.48	−1.55	0.36	0	4	16	7	7	S	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	57.6	+ 3.4	88	26	20	2†	45	0.68	−4.55	0.26	0	4	15	11	4	S	E. D. Bourne.
Williamstown	Grant	943	12	59.6	+ 8.0	93	26	23	1	39	0.95	−2.49	0.33	0	6	16	3	11		Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	58.8	+ 5.4	96	25	17	4	52	1.30	−3.72	0.90	0	5	9	19	2	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	60.4	+ 4.8	89	26	20	2	50	1.14	−2.47	0.79	0	4	19	2	9	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26								1.84	−2.81	0.86	0	6					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25								1.61	−1.62	0.46	0	9	11	12	7		J. V. Oldham.
Farmers	Rowan	668	8	58.0	+ 3.6	93	26	18	4	50	0.85	−3.65	0.32	0	3	19	10	1		Lee Craycraft.
Hazard	Perry		1								1.06		0.40	0	4					Kelly E. Watts.
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								0.60		0.35	0	4	17	2	11	S	C. R. Lee.
Louisa	Lawrence	584	10								1.58	−1.92	0.90	0	6					G. M. Guerin.
Manchester	Clay	1400	3								0.64		0.32	0	4					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	57.6	+ 4.0	94	25†	18	4	51	1.20	−2.30	0.38	0	8	15	9	6	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	58.8	+ 2.6	89	26	20	4	48	0.69	−4.10	0.45	0	5	19	11	0		B. H. Perkins.
Mount Sterling	Montgomery	930	24	58.6	+ 5.2	89	26	24†	1†	39	1.08	−2.57	0.45	0	5	18	10	2	SW	H. Clay McKee.
Pikeville	Pike	634	8								1.28	−2.62	0.52	0	4					I. M. Williams.
Richmond	Madison	926	22	61.3	+ 6.1	90	25†	24	2	37	0.78	−2.45	0.58	0	3	25	2	3	S	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	1	58.3		91	25	24	1†	50	0.95		0.50	0	4	21	5	4	S	O. A. Lund.
Williamsburg	Whitley	939	18	59.2	+ 3.8	90	25†	21	3	51	0.50	−3.90	0.20	0	5	14	5	11	W	N. C. Jones.
State averages and extremes				60.1		96	25	17	4	52	0.96		1.15	T.	5	17	8	5	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T. Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for April, 1915.

STATIONS.	Day of month																														[illegible]
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																
Beaver Dam .... G					T.						.30										.32	.50	.36									1.48
Blandville .... M	T							T.	.82	.02										.03	.37	T										1.24
Calhoun .... G		T			T				T.	.47										.05	.35	.08										.95
Earlington .... G					T						.24										.12	.45	.03									.84
Hopkinsville C					T.																.30	.25	.15									.70
Marion .... O.										.50											.30											.80
Owensboro .... O.					T					T.	.17										T.	.20	.21									.58
Paducah .... O										.20	.38										.02	.16										.76
Central Division.																																
Alpha .... C.					T.				T.	.10	T										T.		1.15					T.				1.25
Anchorage .... O									.02	.22											.03	.48										.75
Bardstown .... S					.05						.22	T.									T.	.25	.21									.73
Bowling Green .... G					.02						.20										.04	.75	.05									1.06
Burnside C						.04			.23		.20	.36									T.	.11										.94
Cloverport‖ .... O.					T.					.12	.11	T.									.07	.24	.07									.61
Edmonton .... G.																																
Eubank‖ .... C.											.70	.35										.15							.12			1.32
Frankfort‖ .... K.					T.	T.					.28	.02									T.	.42	.08						T.			.80
Franklin .... G.					.04					.22	.03										.10	.60		T.								.99
Greensburg .... G.					.02	.03					.48										.03	.45				.03						1.04
High Bridge .... K											.19	.05										.27	.03									.54
Irvington .... O					T.					.33											.12	.13			.20							.78
Leitchfield .... G					.08					.20											.15	.16					T.					.59
Lexington *** .... K				T	.01					.28	.04	T.				T.					.14	.08		T.				.10				.65
Loretto .... S					.06					.03	.23		T	.01							.10	.12	.02	.05				T.				.62
Louisville*** .... O				T.	.01		T.		.09	.07	T.									T.	.06	.62		.17								1.02
Do (Cherokee Park) .... O					.03				.01	T.	.16										.27	.53	.06		.07							1.13
St John .... S					.05						.20										T.	.18	.10									.53
Scott L					.02		T.		T.	.34	.06	.07				.10					.21	.27	.10		.05	T.						1.22
Shelby City .... K.					T.					.07	.42										.26	.11										.86
Shelbyville .... S.					T.						.36	.17										.33	.62									1.48
Taylorsville .... S.					.08					.14						T.					.20	.26			T							.68
Williamstown L					T.	T.		.03			.33	.03	.06			T.					T.	.29	.21									.95
Eastern Division.																																
Beattyville‖ .... K.											.90	.23	T.			T.	T.					.06	.10		T	T	T		.01	T.		1.30
Berea .... K.										T	.79										T.	.12		.09	T.	T.		.14				1.14
Catlettsburg .... B.								.06			.10	.26	.24									T.	.86						.32			1.84
Falmouth .... L.					.03	.02		.06			.46	.12	T.			.06	T					.21	.41		.24							1.61
Farmers .... L.										T.	.23											.30	.32									.85
Hazard .... K.												.20												.20					.26	.40		1.06
Jackson .... K.																																
London .... C.											.10	.35										.05							.10			.60
Louisa‖ .... B.											.17	.20	.13										.90				.08		.10			1.58
Manchester .... K.											.24	.07															.32			.01		.64
Maysville‖ .... O.						.05					.38	.03	.12				T.					.05	.26	.01	T.				.30			1.20
Middlesboro .... C.					.02						.45											.10	.10					.02				.69
Mount Sterling .... L.						T.					.45		T.									.10	.43	.05	T.	.05	T.					1.08
Pikeville‖ .... B.											.16	.18										T.	T					T.	.52	.42		1.28
Richmond .... K.									T.		.58		T.									.14			T.				.06	T.		.78
Weeksbury .... B.							.05			T.	.50	T.													.10			.30				.95
Williamsburg ‖ .... C.						T.			T.		.20	.12										T	T	.03				T	.03	.12		.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

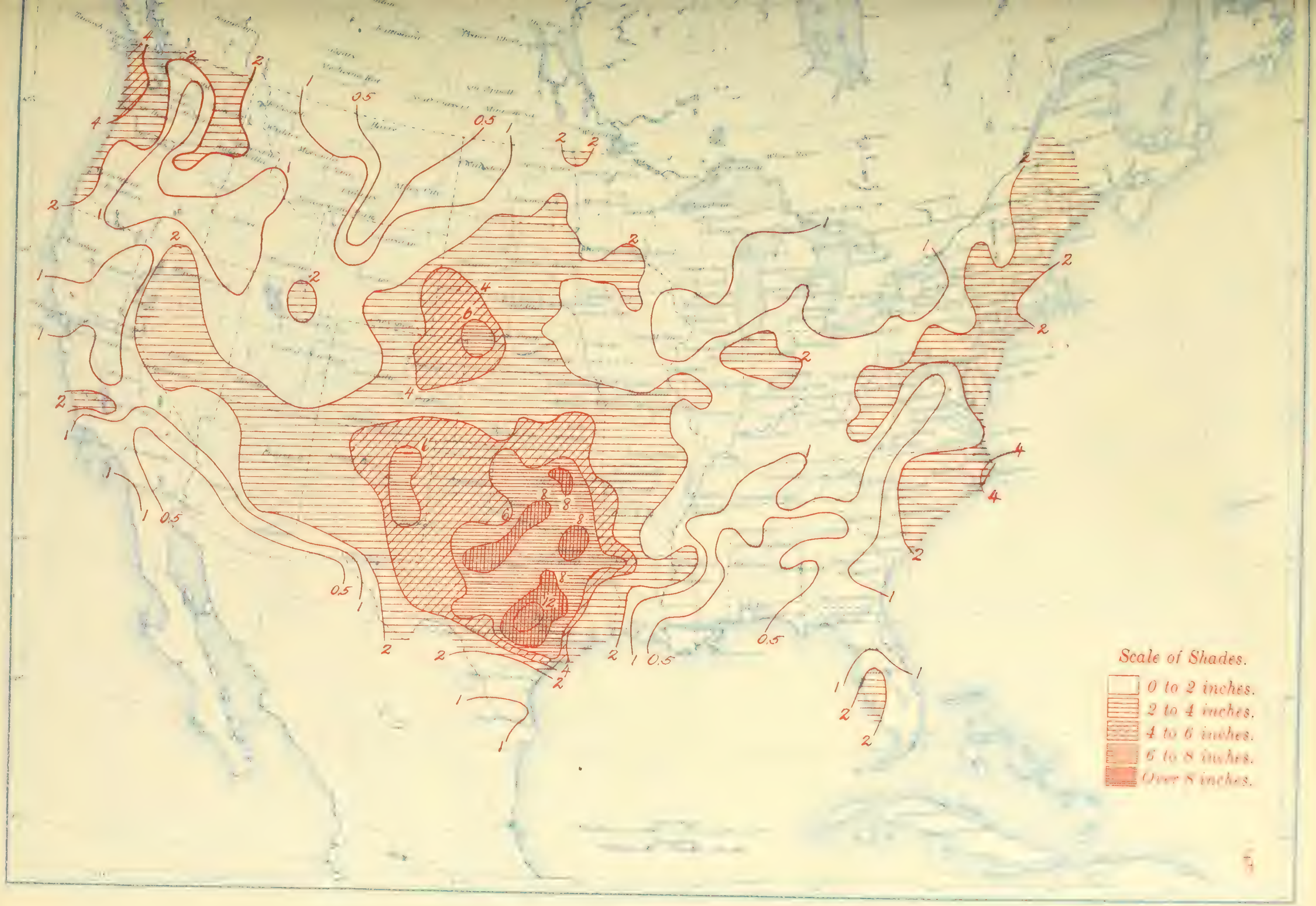
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for April, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	47	46	50	62	72	82	83	81	80	75	67	64	64	70	75	79	76	83	87	83	74	79	84	87	90	89	87	89	83	80	..	75.6
	Minimum	26	28	29	24	47	42	51	51	59	58	55	40	32	33	33	41	49	37	42	47	60	60	60	59	57	58	57	64	56	43	..	46.6
Blandville	Maximum	46	45	49	60	74	77	80	76	79	71	69	66	64	68	72	81	75	79	84	79	72	79	82	82	84	81	82	86	79	76	..	73.2
	Minimum	29	36	30	33	47	53	56	56	61	68	53	49	36	44	44	48	55	49	55	60	59	62	66	64	62	63	63	64	63	51	..	52.6
Calhoun	Maximum	50	49	53	61	73	82	86	82	80	76	67	65	66	70	75	80	76	85	90	85	71	78	83	87	91	87	86	90	86	80	..	76.3
	Minimum	26	27	29	25	47	50	57	52	60	59	52	47	34	38	49	45	49	40	47	51	58	60	62	59	59	59	61	63	58	45	..	48.9
Earlington §§	Maximum	47	48	52	62	74	82	86	83	81	73	69	65	67	72	74	82	78	86	91	87	72	81	86	90	93	90	87	90	83	81	..	77.1
	Minimum	22	29	30	24	50	51	56	55	55	60	53	42	33	37	33	35	46	37	43	47	56	60	58	58	60	53	60	64	57	42	..	46.9
Hopkinsville §§	Maximum	46	45	50	63	74	82	33	80	80	75	71	68	55	72	74	82	78	84	89	84	72	78	85	80	90	89	84	90	88	81	..	75.7
	Minimum	28	29	29	25	28	46	46	51	55	57	55	42	36	38	40	44	45	42	45	45	59	59	61	64	58	56	60	62	58	45	..	46.9
Marion	Maximum	44	46	48	62	73	79	83	79	79	71	66	62	62	67	71	79	74	81	86	83	72	81	84	87	88	86	86	88	87	77	..	74.4
	Minimum	25	31	30	33	47	55	60	53	59	57	52	48	34	42	41	52	55	44	60	62	58	61	62	62	61	63	61	64	65	51	..	51.7
Owensboro §§	Maximum	45	48	49	60	73	81	80	79	80	74	60	79	63	64	71	78	78	80	81	82	71	79	82	85	87	87	84	86	77	76	..	74.0
	Minimum	30	29	30	27	45	47	54	53	56	57	52	40	34	39	42	44	48	38	46	49	59	60	61	61	60	60	61	62	60	45	..	48.3
Central Division																																	
Alpha	Maximum	52	46	45	55	53	76	76	83	79	67	70	67	62	65	70	72	76	77	83	82	80	82	85	85	86	85	83	83	83	74	..	73.1
	Minimum	25	28	32	24	29	59	62	49	64	66	60	47	36	35	37	41	50	40	44	50	62	64	66	56	57	60	66	67	55	46	..	49.2
Anchorage	Maximum	48	48	48	57	71	80	74	81	81	74	66	60	58	66	70	76	70	79	85	87	70	71	85	88	90	89	86	86	81	74	..	73.3
	Minimum	20	21	24	22	38	40	46	49	48	56	56	42	35	30	36	44	42	35	46	51	56	58	56	58	58	58	67	59	58	40	..	45.0
Bardstown §§	Maximum	52	49	50	60	73	84	81	85	83	74	63	66	63	70	74	77	71	83	91	89	77	78	88	92	92	94	86	94	89	81	..	77.0
	Minimum	24	22	28	23	34	45	51	49	53	61	56	40	34	35	34	42	45	39	48	51	62	59	61	61	58	62	61	63	57	43	..	46.7
Bowling Green§§	Maximum	58	50	53	63	75	82	88	85	83	75	72	70	70	75	77	82	80	87	83	85	76	82	87	91	92	91	86	90	89	91	..	78.9
	Minimum	25	28	30	29	42	43	52	46	51	52	52	42	33	34	35	41	44	48	42	46	50	55	56	56	56	59	58	59	54	45	..	45.4
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank§§	Maximum	51	45	43	58	68	78	75	83	80	74	67	65	55	63	65	70	60	78	84	85	78	82	84	87	89	89	85	81	83	76	..	72.7
	Minimum	21	25	26	19	29	43	43	50	51	58	53	40	35	35	33	34	37	37	42	42	47	58	58	57	55	58	55	57	52	38	..	42.9
Frankfort	Maximum	50	49	58	60	69	80	79	79	84	81	68	69	61	64	69	73	74	76	83	89	85	78	84	88	89	91	86	85	87	80	..	75.6
	Minimum	22	21	28	21	43	43	47	47	48	56	54	41	35	32	36	42	36	38	41	46	60	58	57	58	58	58	61	60	54	43	..	44.8
Franklin	Maximum	54	47	49	60	72	80	82	83	80	71	71	75	62	67	71	67	80	80	89	84	72	79	81	86	88	89	84	89	90	81	..	75.4
	Minimum	30	31	31	29	45	55	58	52	57	60	57	47	37	37	40	37	48	45	51	57	60	58	65	61	63	66	64	64	60	50	..	50.5
Greensburg§§	Maximum	57	49	47	59	71	82	88	85	81	70	69	68	61	60	68	78	70	82	87	83	79	83	86	89	91	90	85	89	89	80	..	75.9
	Minimum	22	24	38	22	35	44	50	47	49	50	56	43	35	34	32	38	44	35	40	45	55	57	62	57	58	59	59	59	51	41	..	44.7
Irvington	Maximum	48	45	45	59	65	70	72	79	79	73	65	60	57	64	70	76	69	77	84	82	73	74	83	86	86	86	83	85	80	74	..	71.6
	Minimum	26	30	29	35	45	50	54	57	56	58	55	43	34	37	40	44	44	43	49	51	60	60	58	62	62	60	61	65	58	45	..	49.0
Leitchfield	Maximum	50	45	46	58	71	81	79	82	79	74	67	69	60	66	69	77	70	79	86	83	72	75	82	87	89	88	84	86	80	77	..	73.7
	Minimum	23	27	30	23	44	45	54	50	50	56	53	41	33	35	38	42	48	40	43	49	58	58	58	59	57	62	57	60	54	41	..	46.3
Lexington	Maximum	46	44	39	55	66	76	67	76	79	70	63	60	50	60	64	69	62	72	81	85	75	77	83	85	88	88	84	82	81	71	..	69.9
	Minimum	26	28	26	27	43	51	50	44	57	56	50	39	35	36	38	47	42	43	54	59	59	57	62	64	63	64	65	61	56	51	..	48.4
Loretto	Maximum	52	49	46	57	70	80	78	82	80	76	68	64	59	66	69	76	73	78	86	85	76	80	83	86	88	88	84	86	85	77	..	74.2
	Minimum	20	20	29	19	44	45	54	47	56	62	54	38	30	28	33	39	45	34	39	45	60	58	60	57	56	60	58	62	54	38	..	44.8
Louisville	Maximum	47	47	46	55	70	80	74	78	79	73	64	58	59	15	68	75	68	78	85	86	70	72	83	88	88	89	84	87	80	74	..	72.3
	Minimum	30	32	30	31	46	55	53	50	60	56	52	40	38	39	41	51	44	47	53	58	61	60	64	66	63	66	67	66	60	52	..	51.0
Do. (Cherokee Park)	Maximum	47	46	48	58	73	82	80	79	81	76	67	63	59	65	68	77	71	79	87	86	77	71	85	87	87	88	84	86	83	75	..	73.8
	Minimum	25	25	27	24	45	41	51	48	55	59	52	43	37	35	35	46	42	40	44	50	61	58	58	60	59	62	59	64	60	45	..	47.1
St. John §§	Maximum	50	46	46	56	71	83	79	81	80	72	67	68	58	65	68	78	69	78	87	83	70	74	82	87	90	90	85	90	88	80	..	74.0
	Minimum	23	25	28	21	29	41	48	49	48	58	55	36	30	34	34	41	42	41	42	45	54	58	57	58	56	57	55	60	51	39	..	43.8
Scott	Maximum	46	47	42	58	68	80	70	77	80	71	62	56	56	61	64	72	65	79	86	89	78	78	84	87	89	89	84	87	79	74	..	71.9
	Minimum	21	26	26	22	42	45	49	44	44	57	45	41	37	34	36	45	41	38	50	59	50	58	59	61	60	60	64	63	62	43	..	46.1
Shelby City	Maximum	50	47	44	60	69	80	76	80	80	76	69	62	57	63	68	72	68	79	85	86	80	80	85	90	90	90	86	85	85	79	..	74.0
	Minimum	24	21	27	23	42	49	55	45	52	54	54	40	36	31	35	37	42	37	43	49	55	58	59	58	57	59	62	60	58	43	..	45.6
Shelbyville §§	Maximum	46	45	46	56	68	78	71	76	77	66	62	57	53	61	76	71	65	74	81	84	70	68	80	83	85	86	80	82	79	72	..	69.9
	Minimum	22	22	25	23	28	49	47	45	49	56	52	39	33	32	35	41	42	38	43	47	53	53	59	60	60	60	61	60	57	40	..	44.4
Taylorsville	Maximum	48	46	45	58	70	79	73	76	80	74	66	64	55	63	66	74	66	76	83	85	74	74	76	82	87	88	83	85	83	75	..	71.8
	Minimum	21	20	28	20	38	39	48	47	45	54	55	37	35	30	33	39	45	33	38	42	58	59	58	56	57	59	58	59	53	39	..	43.4
Williamstown §§	Maximum	46	46	45	58	68	80	65	79	80	71	60	58	57	64	67	75	74	80	87	90	79	71	84	89	91	93	89	89	80	78	..	73.1
	Minimum	23	28	24	25	33	47	51	43	46	61	50	40	34	33	34	38	40	41	52	55	57	57	57	61	61	63	64	62	60	47	..	46.2
Eastern Division																																	
Beattyville §§	Maximum	54	50	41	64	72	84	76	87	85	80	72	67	59	68	72	70	70	80	88	92	78	84	88	92	96	92	91	86	90	81	..	77.0
	Minimum	19	21	28	17	24	41	43	38	44	49	55	38	35	29	30	32	40	33	36	42	49	55	55	53	54	54	55	54	51	41	..	40.5
Berea	Maximum	47	46	40	58	67	70	73	78	83	86	79	78	76	64	65	71	65	82	85	87	79	81	84	84	87	89	86	81	84	76	..	74.4
	Minimum	21	20	26	25	42	52	56	58	49	56	55	48	36	33	28	35	35	40	35	55	57	61	62	61	67	57	62	62	60	41	..	46.5
Farmers	Maximum	52	48	44	58	67	80	69	80	84	81	69	61	54	64	70	71	71	78	85	85	78	75	84	85	91	93	88	86	86	77	..	73.8
	Minimum	19	20	25	18	30	44	41	40	47	48	53	35	36	26	51	31	46	32	35	45	57	57	58	54	54	56	56	57	57	39	..	42.3
Maysville§§	Maximum	47	49	42	61	69	82	69	80	85	75	58	60	58	65	70	75	68	79	87	92	74	72	87	91	94	94	89	87	82	76	..	73.9
	Minimum	19	19	22	18	29	42	43	36	38	46	50	39	39	29	30	36	42	34	39	41	52	54	56	55	56	57	60	60	57	41	..	41.3
Middlesboro	Maximum	53	47	44	59	66	79	80	85	81	79	69	66	65	70	70	69	72	79	84	84	81	82	84	85	87	89	88	84	86	80	..	74.9
	Minimum	22	27	32	20	42	47	44	41	55	54	58	41	33	31	32	32	40	33	36	40	48	55	58	51	54	53	55	53	50	44	..	42.7
Mount Sterling§§	Maximum	47	41	39	55	67	78	67	78	85	75	65	61	54	63	66	70	68	76	83	85	76	77	83	85	87	89	86	84	83	75	..	71.6
	Minimum	24	24	27	24	33	47	49	44	48	58	54	42	40	32	36	32	42	37	44	50	59	59	59	62	58	59	63	63	60	43	..	45.7
Richmond §§	Maximum	51	50	41	58	68	79	76	82	82	74	66	64	58	67	69	70	69	78	85	88	77	82	85	89	90	90	86	83	85	77	..	74.0
	Minimum	25	24	27	25	45	50	55	46	58	60	55	43	35	33	36	56	43	41	49	55	59	59	60	62	60	63	65	63	59	48	..	48.6
Weeksbury	Maximum	51	44	43	58	64	79	73	81	83	81	72	63	57	64	67	68	65	80	84	87	79	81	83	90	91	89	86	89	85	78	..	73.8
	Minimum	24	25	29	24	34	48	46	39	54	53	52	41	38	30	31	32	45	32	34	45	53	57	59	55	51	56	54	52	47	45	..	42.8
Williamsburg §§	Maximum	52	48	48	58	70	79	79	83	82	80	68	67	62	68	74	74	80	79	84	85	83	85	86	88	90	90	88	85	82	80	..	75.9
	Minimum	22	22	21	30	35	50	47	42	49	45	43	40	34	31	31	35	44	38	33	41	50	61	63	54	54	53	57	55	51	42	..	42.4

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{1} ^{2} ^{3}, etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

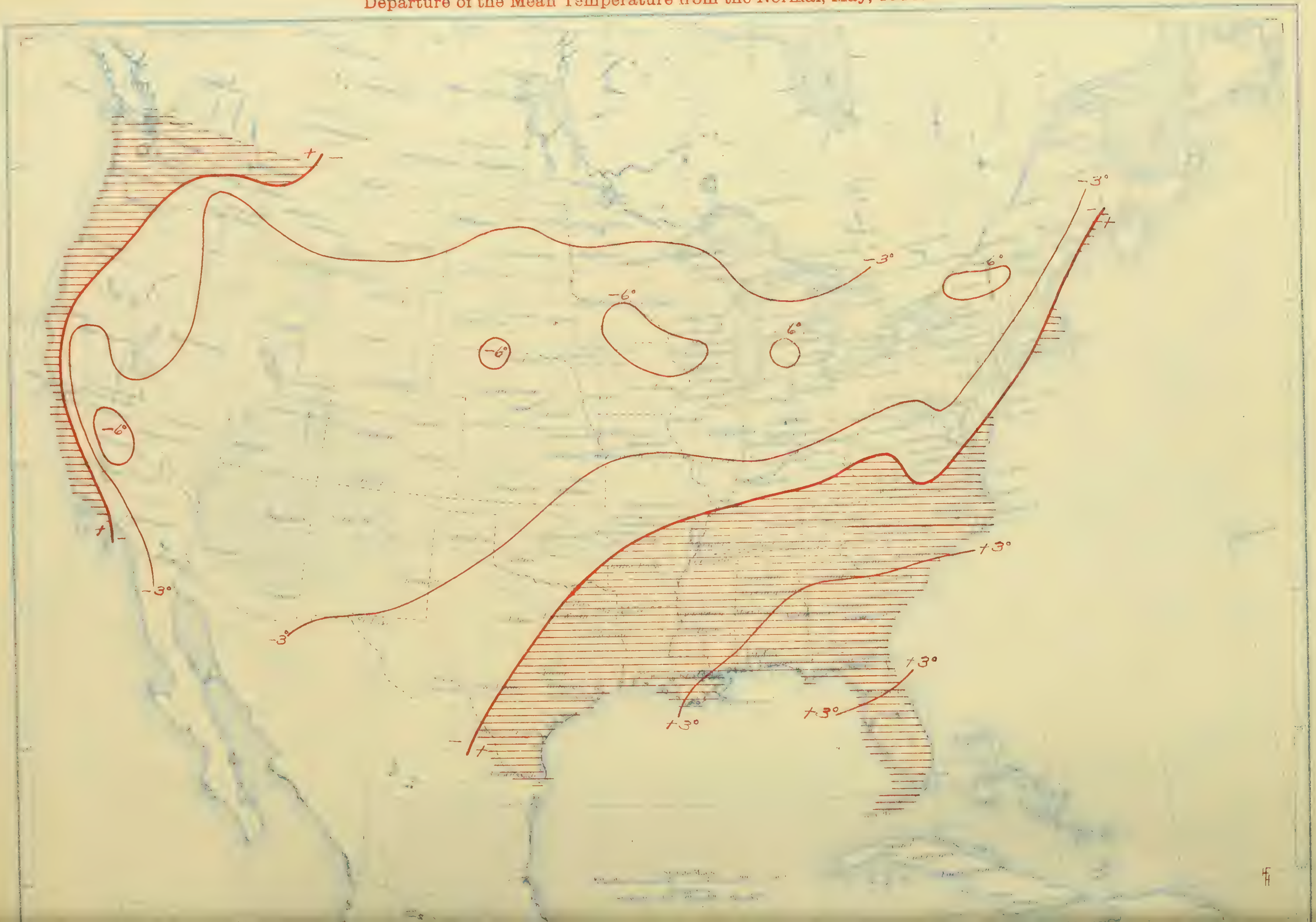
KENTUCKY SECTION

MAY, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 22, 1915

Departure of the Mean Temperature from the Normal, May, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XX. LOUISVILLE, KY., MAY, 1915. No. 5

GENERAL SUMMARY.

The month opened cool. In fact the nights were unseasonbly cool during most of the month, and while there was a umber of warm days, with maximum temperatures of 90 and ver at some stations, and the temperature averaged near ormal, the month as a whole can be classed as a cool May, ue in considerable measure to cloudiness and wetness. Rearkably cool weather, with minimum temperatures ranging etween 38° and 48°, prevailed from the 5th to the 11th, iclusive, and again in the period 17-19th. The pronounced arm periods were the 2-3d and 13-16th.

Droughty conditions which had prevailed over the State ractically since February, were greatly relieved by showers arly in May. Beneficial showers continued intermittently uring the first two decades, while during the last decade rains ccurred daily and were frequently heavy, causing damage in me localities. Also there were several destructive thunderorms, the most severe occurring on the 25th, when a wind elocity of 74 miles per hour was registered at Louisville, the ighest wind velocity on record for that station.

Rainfall over the State for the month averaged 6.62 inches, the largest for May since State records began in 1889. At the eginning of May the average total rainfall over the State since e first of the year showed a deficiency of 7.08 inches. The rplus in May of 2.70 inches reduced this deficiency to 4.38 ches, the summer being ushered in with soil, streams and ater sources generally well supplied with sufficient moisture.

Abundant rains during the month furnished much needed oisture and crops generally made splendid progress. By the iddle of the month corn planting was practically completed, it cultivation was hindered the latter part by continuous ins. Tobacco planting, delayed on account of scarcity of ants, was progressing rapidly at the end of the month, also heat was heading out but short. Oats, meadows, pastures id grasses of all kinds, garden truck and fruit were in fine ondition, and strawberries were yielding an excellent crop.

PRESSURE.

As evidenced by the rainy conditions prevailing during the onth, there was much activity in pressure formations, in fact evelopments in this respect—seven low and five high pressure eas over the great central valleys—were not only unusually rge for May, but even more numerous and stronger than in ther March or April preceeding. Weather conditions over entucky were under the control of low pressure formations uring the periods 2nd, p. m.,---4th, 6-8th, 15-18th, 20th-21st id 25-29th; and were dominated by high pressure formations uring the periods 1st-2d, 5th, 9-12th, 23d-24th and 30th-31st.

The mean sea-level pressure, based on the records of two ations, was 29.90 inches. The highest was 30.23 inches at oth Louisville and Lexington on the 10th and the lowest 29.59 ches at Louisville on the 3d and at Lexington on the 29th.

TEMPERATURE.

The mean temperature for the State, as determined from the cords of 36 stations, was 65.2°, which is 0.5° below the May ormal. The average temperature at the various stations was markably even and varied but little from normal at any ation. At some stations the temperature departure was slightly in excess of normal, at others slightly deficient. The highest temperature was 95° at Bowling Green on the 3d and the lowest 35° at Berea on the 18th, both well within the extremes for past Mays.

PRECIPITATION.

The average precipitation for the State, based on the records of 47 stations, was 6.62 inches, which is 2.70 inches in excess of normal. At only two stations, namely, Blandville in the extreme west and Louisa in the extreme east, was the rainfall of the month below normal, and in both instances the deficiency was less than 0.5 inch. The rainfall at the various stations ranged between 3.94 inches at Pikeville and 8.89 inches at Bowling Green. The greatest rainfall was over the west-central counties, extending from Hopkins and Christian to Casey, and from Daviess and Hancock to the Tennessee line, where the amounts were above 8 inches. On either side of this area amounts gradually decreased to between 4 and 5 inches, with many stations reporting between 6 and 7 inches.

Excessive 24-hour rainfalls occurred as follows: 6-7th, 2.93 inches at Beaver Dam, 2.60 inches at Calhoun, 3.50 inches at Earlington, and 2.72 inches at Leitchfield; 22d, 2.80 inches at Hopkinsville; 26th, 3.18 inches at Maysville; and 27th, 2.85 inches at Middlesboro.

WIND.

The total wind movement at Louisville was 8294 miles and at Lexington 7196 miles, the average hourly velocity being 11.1 and 9.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 74 miles and at Lexington 43 miles an hour, from the northwest on the 25th at both stations.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 79 per cent. and at 7 p. m. 72 per cent., which is the highest for May on record at this station during the past 17 years.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month was 65 at Louisville and 50 at Lexington. This is near the May average for the Louisville station.

Comparative Data for May

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	63.6	−2.1	94	28	4.03	+0.11	..
1890	63.9	−1.8	93	32	4.22	+0.30	..
1891	62.6	−3.1	90	29	1.78	−2.14	..
1892	64.6	−1.1	90	36	5.49	+1.57	..
1893	63.2	−2.5	96	37	5.59	+1.67	..
1894	64.5	−1.2	99	32	3.54	−0.38	..
1895	63.9	−1.8	99	29	3.16	−0.76	8
1896	72.2	+6.5	106	42	5.34	+1.42	11
1897	61.4	−4.3	92	32	3.27	−0.65	10
1898	67.6	+1.9	93	31	4.52	+0.60	10
1899	68.8	+3.1	94	42	4.79	+0.87	11
1900	66.3	+0.6	96	29	3.49	−0.43	10
1901	63.7	−2.0	97	34	2.65	−1.27	10
1902	70.0	+4.3	93	35	3.55	−0.37	9
1903	68.0	+2.3	98	29	3.09	−0.83	8
1904	65.0	−0.7	98	33	3.05	−0.87	10
1905	68.0	+2.3	95	38	5.23	+1.31	11
1906	69.5	+3.8	95	31	2.54	−1.38	9
1907	61.3	−4.4	93	30	5.07	+1.15	12
1908	66.7	+1.0	96	28	4.34	+0.42	12
1909	63.9	−1.8	93	27	4.64	+0.72	12
1910	61.1	−4.6	89	30	4.81	+0.89	12
1911	69.4	+3.7	105	29	2.46	−1.46	5
1912	66.7	+1.0	97	37	4.53	+0.61	10
1913	66.1	+0.4	99	29	2.92	−1.00	8
1914	66.5	+0.8	103	32	2.16	−1.76	5
1915	65.2	−0.5	95	35	6.62	+2.70	15

Climatological data for May, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	65.6	−0.4	88	3	40	8	35	8.65	+4.78	2.93	0	14	11	9	11	W	W. T. Austin.
Blandville	Ballard	445	33	67.8	+1.3	92	14	44	5	31	4.28	−0.25	1.14	0	13	7	14	10	SE	E. W. Horr.
Calhoun	McLean	437	11	67.6	0	90	13†	42	10	41	7.02	+3.65	2.60	0	15	4[a]	13[a]	13[a]	S	W. A. Taylor.
Earlington	Hopkins	420	24	67.3	+0.5	92	3†	40	10	36	8.33	+3.32	3.50	0	9	11	3	17	......	Brick Southworth.
Hopkinsville	Christian	524	18	66.7	−0.7	91	14	42	9	37	8.33	+3.96	2.80	0	14	16	0	15	E	W. F. Randle.
Marion	Crittenden	571	17	67.1	+0.1	89	3†	43	9†	29	5.97	+1.77	1.41	0	10	9	11	11	SW	B. C. Paris.
Owensboro	Daviess	479	17	65.6	−0.6	89	3	44	5	28	8.83	+4.94	1.75	0	16	9	4	18	SE	Henry S. Berry.
Paducah	McCracken	341	26	......	......	......	......	......	......	......	5.17	+1.20	1.40	0	11	......	......	......	......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	66.0	−0.6	86	15	43	10	29	6.90	+3.02	1.45	0	13	8	8	15	W	W. W. Hicks.
Anchorage	Jefferson	700	13	63.2	−1.2	89	14	39	18	32	5.80	+2.07	1.33	0	15	15	1	15	W	C. E. Barret.
Bardstown	Nelson	637	17	66.4	−0.3	93	15	40	18	41	8.48	+5.06	2.20	0	18	11	5	15	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	66.9	−0.7	95	3	40	10†	38	8.89	+4.81	2.10	0	14	13	14	4	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	......	5.74	+1.67	1.18	0	13	......	......	......	......	K. W. Massey.
Cloverport	Breckenridge	375	1	......	......	......	......	......	......	......	7.02	......	1.70	0	17	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Lee Ray.
Eubank	Pulaski	1177	20	63.9	−0.3	89	15	38	18	46	8.44	+4.49	2.08	0	12	9	3	19	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	66.5	+1.6	90	16	39	18	40	6.17	+2.35	1.07	0	20	7	7	17	S	Geo. L. Barnes
Franklin	Simpson	691	20	67.8	+0.8	88	3†	46	10†	31	8.69	+4.64	2.00	0	15	4	18	9	NW	J. E. Newman.
Greensburg	Green	581	22	65.9	+1.0	90	15	40	10†	41	8.67	+4.75	2.05	0	16	4	12	15	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	......	......	......	......	......	......	......	5.90	+2.28	1.45	0	16	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	17	65.8	−0.8	89	14	43	10	30	6.26	+2.65	1.38	0	14	9	5	17	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	65.4	−0.1	88	15	41	18	35	6.37	+2.37	2.60	0	12	6[a]	13[a]	11[a]	W	John E. Stone.
Lexington	Fayette	989	30	62.4	−1.9	87	15	41	18	29	7.23	+3.71	2.59	0	16	7	9	15	E	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	64.6	−1.1	85	3†	36	18	41	8.72	+4.94	2.45	0	22	8	4	19	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	64.2	−2.5	89	15	46	18	29	4.62	+0.98	0.94	0	16	5	8	18	SE	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	65.0	......	88	15	41	18	38	5.21	......	0.88	0	16	2	11	18	SW	Wm. I. Hunt.
St. John	Hardin	777	18	63.6	−1.1	90	3†	39	18	37	7.75	+3.77	1.80	0	13	11	3	17	......	Sisters of Loretto.
Scott	Kenton	900	17	61.5	−2.7	82	3†	37	18	33	6.96	+2.85	2.68	0	20	1	9	21	N	E. B. Wilson.
Shelby City	Boyle	1087	20	66.0	+1.5	92	15	38	18	34	6.87	+3.12	1.55	0	13	9	12	10	SW	H. F. Ewing.
Shelbyville	Shelby	825	25	62.1	−2.9	87	15	38	18	38	7.54	+3.53	1.65	0	16	12	4	15	SE	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	64.2	−0.8	89	15	38	18	40	6.01	+2.49	1.17	0	15	5	5	21	N	E. D. Bourne.
Williamstown	Grant	943	12	61.4	−2.0	83	3†	41	9	35	5.75	+2.49	2.23	0	15	9	10	12	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	65.3	+1.2	90	15	38	18	45	5.66	+1.48	1.00	0	15	8	20	3	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	65.0	−0.6	90	14	35	18	41	6.46	+2.48	2.20	0	15	12	7	12	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26	......	......	......	......	......	......	......	5.80	+2.34	1.32	0	17	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	530	25	......	......	......	......	......	......	......	6.15	+2.57	1.28	0	19	4	9	18	E	J. V. Oldham.
Farmers	Rowan	668	8	64.3	+0.6	86	21	36	18	45	4.75	+0.69	1.25	0	10	10	11	10	......	Lee Craycraft.
Hazard	Perry	......	1	......	......	......	......	......	......	......	6.81	......	0.97	0	15	......	......	......	......	Kelly E. Watts.
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
London	Laurel	1190	0	......	......	......	......	......	......	......	7.04	......	2.80	0	13	9	1	21	W	C. R. Lee.
Louisa	Lawrence	584	10	......	......	......	......	......	......	......	4.17	−0.35	0.90	0	15	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	3	......	......	......	......	......	......	......	5.84	......	0.97	0	10	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	61.8	−3.3	85	25	37	18	40	8.75	+4.96	3.18	0	19	7	10	14	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	66.2	+1.5	89	15	41	10	37	7.49	+3.28	2.85	0	13	14	15	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	64.0	+0.1	87	15	40	18	34	5.72	+1.67	1.15	0	16	7	10	14	SW	H. Clay McKee.
Pikeville	Pike	634	8	......	......	......	......	......	......	......	3.94	+1.18	1.50	0	12	......	......	......	......	I. M. Williams.
Richmond	Madison	926	22	65.4	−0.1	90	15	40	18	35	4.64	+1.10	1.00	0	13	9	7	15	S	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	1	66.2	......	87	23†	39	10	40	5.93	......	1.05	0	14	16	3	12	S	O. A. Lund.
Williamsburg	Whitley	939	18	66.8	+0.5	94	15	43	5	40	5.33	+1.25	1.48	0	16	10	9	12	W	N. C. Jones.
State averages and extremes				65.2	−0.5	95	3	35	18	46	6.62	+2.70	3.50	0	15	9	8	14	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

MISCELLANEOUS.

Destructive storms were numerous and extensive during the month, and much damage was done in many localities by hail and excessive rains, the most important being as follows:

May 2.—Oats, wheat, gardens and fruit were damaged by hail in Hardin county, crops being practically destroyed in the Garnettsville and Grahamton sections. Much damage was caused to trees, plate glass windows and telephone lines in Louisville and vicinity by a windstorm.

May 14.—At Winchester lightning struck a hotel and caused damage to the extent of about $10,000.

May 19.—Lightning destroyed an oil tank near Crampton, Wolfe County.

May 21.—Near Sharpsburg, Bath County, a heavy rain, wind and hail storm caused considerable damage to crops, trees and buildings and killed many young lambs. In Clark, Todd and Christian Counties hail and wind storms caused extensive damage to crops, buildings and telephone and telegraph lines. In Todd and Christian Counties crops over limited areas were practically destroyed, the losses of individual farmers being in many cases from $500 to $1000. In Marshall County Noah Henson, a young farmer, was killed by lightning.

May 22.—Miss Grace Cole was severely shocked by lightning at Lexington.

May 23.—A wind and rainstorm caused considerable damage in Henderson County.

May 25.—Windstorms with hail and excessive rains occurred in many localities in the central and western counties. Property damage in Maysville and Mason County was estimated at $50,000. In Henderson buildings were damaged by wind

Daily Precipitation for May, 1915.

STATIONS.	Day of month																															[illegible]
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam G.			.18			2.93	.47					.32	.05						.16	.18		.90	.12	.86		1.00	.83	.06	.70			[illegible]
Blandville M.	.04	.05	T			1.14		.05			.01	.23				.07				.57	.15	.49	.60				.49	.39				[illegible]
Calhoun G.		.31	.22			T.	2.60					.47		.01		T	T		.32	.32	.03	.58	.70		.37	.10	.03	[illegible]	.55	T.		7.02
Earlington ‖ G.			T.				3.50	.10				.33	.12						T	T		.18		1.00		1.50	1.23	[illegible]	.07			[illegible]
Hopkinsville C.	.10		.05			.35	1.60				.30	.20							.05			2.80	.30			1.20	.60	.10	.60	.08		[illegible]
Marion O.	T		T.			.08	1.33	T.				.50							.21	.43	T	.51	.52		1.15	T	1.00		.24			[illegible]
Owensboro ‖ O.	T.	T.	.05	.23			1.75					.32	.04				T	T	.10	1.17	.22	.60	.05	1.41		1.06	.30	.41	1.02	.10		8.83
Paducah ‖ O.	.08						1.40					.33								.38	.46	.46		.60		.12	.58	.24	.52			5.17
Central Division.																																
Alpha C.	T.	.61	.40			.55	T.				.24	T.						.20	T		.50	.65	1.45		.65	.25	.70		.25	T	.45	6.90
Anchorage O.		1.33	.34			T.	.54				.15				.03	T	T.	.06	.12	.87		.71	.64		.40	.21	.27	.08	.05			5.80
Bardstown ‖ S.	.03		.20	.25			2.20	.06				.11				.01			.02	.11	.21	2.00	.34	.96		.63	.41	.32	.52	.10		[illegible]
Bowling Green ‖ G.	T.		1.60	.10		T.	1.22					.35	.12						.04			2.10	.40	1.08		1.17	.22	.18	.28	.03		8.89
Burnside ‖ C.	T.		.77	.62			.20	.05				.10	.05	T.					.18			.27	.84	1.18		.60	.55	.33	T	T		5.74
Cloverport ‖ O.	T.	T.	.24	.14			1.70	.05	.06			.27	.02				T.		.20	.58	.02	1.06	.35	1.13		.71	.05		.39	.05	T.	7.02
Edmonton G.																																
Eubank ‖ C.			1.00				.65	.12											.15	.27		.84	1.10	2.08		.10	.70	.73		.40		8.44
Frankfort ‖ K.			1.07	.13			.81	.02				.16	.03	.02				.02	.03	.19	.50	.87	.31	.43		.33	.11	.55	.04	.12	.03	6.17
Franklin G.	.03	.43	.19	.53		.64	1.03				T.	.50						.20	.03		T.	2.00	1.32		.64	.75	T.	.20	.20			8.69
Greensburg ‖ G.	T.	.02	.92	.02			2.05	.58				.20							.35	.05		1.65	.26	.90		.80	.65	.12	.09	.01		8.67
High Bridge ‖ K.		.02	.17	.18			1.30	.06				.20	.10	.08						.03		1.45	.40	.56		.40	.06	.86	.03			5.90
Irvington O.	T.	.62	.07	.15				1.00				.32						T.	.13	.39	T.	.84	1.38		.75	.15	.24	.09	.13			6.26
Leitchfield G.	T.	.05	T.			*	2.72				*	.25							T		*	1.15	.82		.91	.18	.18		.11			6.37
Lexington *** K.		.45	.43			.37	2.23					.18	.02	.02	T.	T.	T.	T.	.03	T.	.07	1.59	.54		.29	.18	.62	.16	T.		.05	7.23
Loretto S.	.04	.04	.23	.14		.01	1.91	.02	T.		.01	.19	.02						.17	.16	.04	2.45	1.26	.02	.69	.60	.03	.63	.04	T	.02	8.72
Louisville *** O.	T.	.45	.22			.51	.32	T.				.13		T.	.05	T.	T.	.06	.16	.89	T.	.61	.50	T.	.30	.19	.08	.06	.09	T		4.62
Do. (Cherokee Park) O.		.35	.20			.82	.04				.22	.04		T.				.07	.20	.88	T.	.82	.68		.36	.12	.21	.10	.10			5.21
St. John S.	T.	T.	.10	.50	T.		1.80	T.				.28	T.						.19	.10		.80	.90	1.20		1.10	.20	.08	.50	T		7.75
Scott L.		.35	.84	.07	.07		.55		.06			.04		.11	.16	T.	.03		.03	.69	.14	.64	.02	T.	.24	2.44	.14	.30	.04			6.96
Shelby City K.	T.	T.	.45	.11		T.	1.21	.23				.13							.28		.13	1.25	.70	T		1.55	.05	.41			.37	6.87
Shelbyville S.			1.65	.25			1.00					.20						.10	.10	.40		.45	.70	.68		.52	.18	1.00	.18	.11	.02	7.54
Taylorsville S.	.01	.28	.07	.08		.01	1.17					.19					T.	T.	.18	.34	T.	1.00	1.14		.49	.22	T.	.80	.03		T	6.01
Williamstown ‖ L.			2.23	T.	T.		.20	.10				.05	.05	.06	.14				.30	.10	.30	.26	1.15	.11		.60	T.	.10		T		5.75
Eastern Division.																																
Beattyville ‖ K.		T	.78	.13			.05	.39				.02	T.	.01	.01			T.	T.	.03		.54	.75	.98		.21	1.00	T	.30	.46		5.66
Berea K.			.26	.10		T.	.27					.31	.01					T.	.29		.03	1.15	1.27		.22	2.20	.12	.03	.14		.06	6.46
Catlettsburg ‖ B.			.62	.14			.22	.28				.06	.04			.04			.10	.06	T.	1.32	.42	.04		.60	.28	.26	.10	1.22		5.80
Falmouth ‖ L.			1.28	.08			.60	.12				.09	.02	.20	.08				.25	.12	.24	.52	.57	.09		.93	.03	.65	.25		.03	6.15
Farmers L.							.35	.20												.15	.65	.82	.33	.35		1.25		.38	.27			4.75
Hazard ‖ K.		.20	.40	.10			.20	.20				T.	.15		.40	T.			T.	.14		T.	.60	.95		.50	.97	.95	.10	.95		6.81
Jackson ‖ K.																																
London ‖ C.			.40				.54												.10	.05		.22	.42	2.80	.30	.30	1.09	.55	.22	.05		7.04
Louisa B.			.74	.34			.10		.09			.20				.06				.12		.20	.25	.08		.90	.53	.06	.10	.40		4.17
Manchester ‖ K.			.55										.18							.47			.97	.95		.88	.27	.93	.28	.36		5.84
Maysville ‖ O.			1.11	.02	.02		.87	.28				.06	T.	.04	T.	.23	T.		.24	.05	.78	1.20	.34	.05		3.18	.12	.08	.05	.03	T.	8.75
Middlesboro C.	.08		.93	.43			.48					.22							.23			.25	.78	.08		.72	2.85		.32	.12		7.49
Mount Sterling ‖ L.			.80	.34			.72					.16	.09	.20	.06				T.	.05	T.	1.15	.32	.66	.02	.42		.06	.30	.37		5.72
Pikeville B.			.52	.06			T.	.06		.04	.12		T.	.04									.42	.32		T.	.66	.04	.16	1.50		3.94
Richmond ‖ K.		.03	.65	.17			.44	T.				T.	.06					T.		.34		1.00	.38	.70		.25	.13	.22	T.	.27		4.64
Weeksbury B.		.10	.70	.05			.10					.50			.10				.33			.20	1.00				1.05	.30	.40	.50	.60	5.93
Williamsburg ‖ C.	.03		1.48	.35			.11	.30				.08							.08	.23		.12	.40	1.10		.39	.38	.18	.05	.05		5.33

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

and one was struck by lightning: Owensboro, buildings damaged, trees uprooted and telephone poles blown down; Glasgow, barn burned by lightning; Cloverport, buildings unroofed; Harrison and Lyon Counties, damage to trees and crops by wind, hail, lightning and excessive rains; Louisville and vicinity, severe windstorm with highest velocity on record there, probably 1000 shade trees blown down, much damage to roofs, plate glass windows, etc.; Sturgis, damage to crops by hail.

May 26.---Excessive rains caused flooding of lowlands and extensive damage in Larue and Campbell Counties. A house was wrecked by lightning in West Covington,

May 28.---Residence of Isaac Taylor near Panther, Daviess County, was struck by lightning and Mrs. Taylor seriously shocked. Crops, fences and buildings in the creek valleys near Whitesburg were swept away and a boy named Stephen Campbell is believed to have been drowned.

Rivers.---Moderate stages prevailed in the streams of the State, including the Ohio, during the first decade, after which there was a gradual decline to somewhat low stages by the 22d. The heavy rains caused a sharp rise during the last week and the month closed with plenty of water in all streams.

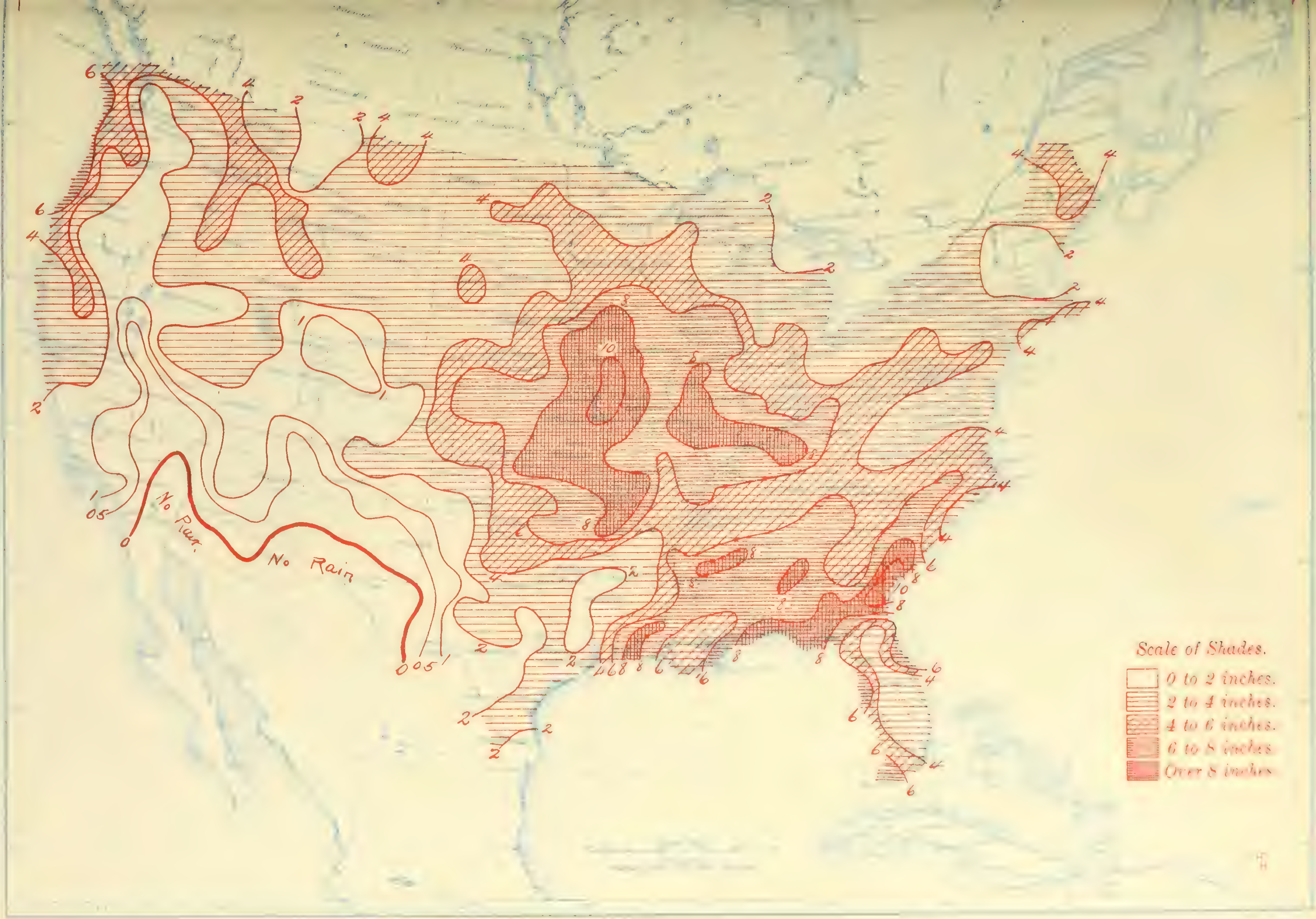
ERRATA.—April, 1915: Shelbyville, greatest 24-hour precipitation should be 0.62

Daily temperatures for May, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	85	87	88	67	69	75	72	70	61	70	75	72	84	86	87	84	60	68	67	80	82	78	71	79	85	83	74	75	65	69	75	75.6
	Minimum	56	52	65	55	47	52	57	40	47	43	48	60	54	64	64	70	50	43	46	50	62	63	63	61	58	59	61	61	62	56	54	55.6
Blandville	Maximum	80	81	87	74	71	72	70	72	70	71	73	78	90	92	88	88	68	68	78	79	81	77	73	84	86	86	82	77	67	67	74	77.4
	Minimum	54	60	70	56	44	56	56	48	45	48	52	59	59	66	69	65	48	48	54	62	67	64	62	62	66	69	65	64	56	57	56	58.3
Calhoun	Maximum	79	85	88	80	73	75	73	72	69	73	77	78	90	90	89	87	88	70	69	80	83	79	68	82	85	85	83	75	75	73	..	^{a}79.1
	Minimum	56	53	65	54	45	52	59	49	43	42	49	59	57	63	63	67	47	45	48	58	69	62	61	61	58	59	66	66	57	54	..	^{a}56.2
Earlington §§	Maximum	84	91	92	70	74	79	75	73	68	75	77	71	88	92	92	90	84	71	73	82	85	84	68	82	89	89	87	79	66	70	75	79.8
	Minimum	51	54	62	56	43	47	58	46	43	40	42	51	54	60	65	67	48	44	49	50	64	63	64	62	59	63	63	64	60	54	52	54.8
Hopkinsville §§	Maximum	84	85	90	73	75	75	76	74	69	74	74	70	81	91	90	89	64	71	75	82	82	89	79	84	88	83	82	79	64	67	75	78.5
	Minimum	49	48	64	56	44	50	52	49	42	44	50	55	52	56	63	65	44	43	51	53	61	63	64	60	62	64	64	64	59	56	54	54.9
Marion	Maximum	81	84	89	79	72	75	71	70	67	72	72	74	89	89	88	87	76	68	70	79	81	76	70	81	85	84	77	76	77	65	72	77.3
	Minimum	57	55	66	54	45	50	60	50	43	43	50	59	61	66	68	68	47	47	49	58	69	63	60	61	63	63	61	64	56	54	55	56.9
Owensboro §§	Maximum	73	85	89	61	68	74	72	70	65	71	77	75	86	86	88	86	61	65	66	73	82	72	68	77	82	81	72	73	68	72	75	74.6
	Minimum	55	57	61	53	44	53	60	47	50	45	51	57	58	64	63	67	49	48	50	49	63	64	62	61	58	64	59	65	61	60	57	56.6
Central Division																																	
Alpha	Maximum	67	81	77	70	63	68	69	68	66	67	73	67	76	82	86	84	73	65	63	79	80	71	81	75	76	77	75	71	76	68	65	72.9
	Minimum	56	52	65	59	49	54	68	51	53	43	51	57	53	60	63	73	55	45	53	66	71	65	60	68	59	73	63	64	68	59	60	59.2
Anchorage	Maximum	71	81	84	63	65	71	71	65	71	75	75	85	83	89	82	74	65	59	61	77	84	74	69	77	83	78	65	75	70	70	76	73.8
	Minimum	47	50	60	52	42	45	44	40	40	47	60	58	59	62	67	42	40	39	49	55	60	63	56	61	55	60	52	61	56	53	55	52.6
Bardstown §§	Maximum	71	87	90	68	69	78	74	73	69	75	84	77	89	90	93	87	60	69	68	80	84	76	70	81	87	82	76	77	85	72	81	78.1
	Minimum	52	46	61	55	43	45	57	49	46	41	49	56	55	61	64	68	48	40	50	51	60	63	63	60	56	63	55	57	64	57	59	54.6
Bowling Green §§	Maximum	83	88	95	70	73	77	76	73	70	77	78	77	86	89	91	90	70	71	73	88	88	82	82	82	89	85	77	78	69	70	74	79.7
	Minimum	54	50	59	53	45	46	60	49	45	40	48	59	54	60	62	64	47	40	47	60	67	60	60	58	57	58	60	61	60	52	53	54.1
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	88	84	81	70	65	77	70	62	67	70	79	70	82	85	89	83	76	69	67	82	81	74	81	79	83	80	76	75	73	69	73	76.1
	Minimum	42	45	55	52	31	44	49	53	42	39	47	54	50	54	57	61	50	38	43	42	64	61	59	58	54	60	58	53	63	60	56	63.7
Frankfort	Maximum	77	83	85	80	79	74	76	76	74	70	76	79	86	84	88	90	84	64	63	75	86	85	76	81	84	85	78	81	82	74	80	79.2
	Minimum	50	43	58	45	46	44	61	49	46	41	44	58	55	59	61	68	48	39	48	54	61	63	58	60	55	64	53	57	63	58	58	53.8
Franklin	Maximum	79	86	88	75	70	72	72	71	66	60	73	73	81	87	88	86	80	68	71	84	83	76	83	77	84	79	77	75	71	71	72	77.0
	Minimum	58	55	56	54	47	54	63	53	51	46	52	59	56	66	67	69	51	46	51	62	71	62	64	62	64	65	65	64	60	58	58	58.7
Greensburg §§	Maximum	75	86	84	69	68	74	74	72	68	71	79	69	85	88	90	86	63	72	69	83	85	75	83	82	87	85	74	74	71	73	75	77.1
	Minimum	50	45	60	55	43	47	55	51	48	40	48	55	54	57	60	69	50	40	49	50	69	60	61	57	57	62	61	63	63	58	58	54.7
Irvington	Maximum	72	84	84	75	67	75	75	70	64	69	75	74	83	89	88	83	75	64	66	77	84	79	68	77	84	81	70	75	75	70	76	75.7
	Minimum	50	54	62	58	46	50	60	48	45	43	48	46	57	66	62	69	48	44	48	57	71	64	60	63	59	63	55	65	59	56	56	55.9
Leitchfield	Maximum	76	85	87	70	69	75	73	71	65	71	75	72	84	87	88	85	65	67	67	82	83	76	72	..	84	84	73	74	65	69	75	^{a}75.6
	Minimum	52	50	63	55	45	50	58	50	45	42	49	58	54	61	62	65	47	41	48	57	71	62	59	..	58	62	58	63	57	56	54	^{a}55.1
Lexington	Maximum	64	80	81	62	62	70	70	68	60	64	74	69	80	76	87	80	58	55	60	79	81	73	71	74	80	78	68	75	72	66	72	71.3
	Minimum	51	51	56	49	45	47	57	51	46	43	50	56	56	59	60	58	45	41	46	52	67	61	59	61	58	56	51	56	57	55	58	53.5
Loretto	Maximum	73	83	85	76	67	75	72	71	66	70	77	70	83	85	85	83	77	67	63	80	81	76	70	78	83	80	70	72	71	67	71	75.1
	Minimum	52	42	60	54	42	44	60	50	41	39	45	59	52	59	59	68	47	36	48	55	67	63	60	62	55	64	56	64	59	56	59	54.2
Louisville	Maximum	67	80	85	64	65	71	73	71	65	69	75	74	86	83	89	83	58	59	60	75	83	72	70	77	81	78	66	72	69	68	73	72.9
	Minimum	51	52	56	53	49	52	57	51	47	47	50	60	60	62	64	54	46	46	48	55	69	62	59	62	60	57	53	63	58	56	58	55.4
Do. (Cherokee Park)	Maximum	68	80	84	82	65	72	75	72	75	70	74	75	85	82	88	84	85	61	60	73	85	92	77	76	81	76	73	73	80	68	74	76.3
	Minimum	50	46	59	54	46	47	62	47	44	42	45	60	58	58	61	67	47	41	48	53	66	64	58	60	55	63	52	60	60	57	57	54.4
St. John §§	Maximum	72	85	90	64	69	74	74	70	67	68	76	74	84	87	90	85	58	67	64	81	84	76	67	70	83	82	69	72	69	68	74	74.6
	Minimum	50	48	60	51	42	46	55	46	41	41	49	54	56	58	59	66	46	39	48	49	60	62	59	60	52	61	50	55	62	55	55	52.7
Scott	Maximum	70	76	82	73	62	68	73	70	64	69	75	70	81	74	80	80	71	60	55	65	82	75	69	78	78	72	62	72	74	70	72	71.7
	Minimum	42	43	57	52	42	45	57	47	44	40	47	58	59	57	52	65	46	37	45	48	62	61	52	60	52	54	45	53	60	54	54	51.3
Shelby City	Maximum	74	85	84	81	68	76	72	72	68	72	80	74	84	85	92	86	82	70	60	83	83	67	78	81	86	80	71	76	73	68	73	77.2
	Minimum	50	45	59	58	45	45	62	53	46	42	46	54	52	57	60	71	48	38	47	53	67	62	62	61	55	62	56	63	62	56	59	54.7
Shelbyville §§	Maximum	71	82	83	61	65	69	73	68	65	69	76	70	84	83	87	82	67	58	60	76	82	72	69	76	81	76	68	73	70	66	74	72.8
	Minimum	46	44	52	54	42	47	53	47	44	40	45	51	52	58	60	64	46	38	45	47	54	62	58	60	54	51	51	53	64	56	56	51.4
Taylorsville	Maximum	69	81	84	67	67	75	74	71	65	69	75	69	84	82	89	84	77	59	63	76	83	76	73	78	82	76	69	75	73	70	74	74.5
	Minimum	50	41	60	53	41	42	61	47	47	39	43	59	52	58	61	70	48	38	48	56	67	63	60	60	55	64	54	61	62	56	58	54.0
Williamstown §§	Maximum	72	81	83	62	64	69	72	71	65	71	79	72	83	77	83	82	54	63	57	70	83	72	69	78	81	75	65	76	82	72	74	72.8
	Minimum	44	46	55	54	42	42	50	47	41	43	47	49	57	59	54	54	45	45	43	47	50	61	53	59	57	56	46	47	56	52	52	50.1
Eastern Division																																	
Beattyville §§	Maximum	70	88	86	72	71	76	73	78	71	73	83	74	85	86	90	89	65	77	62	89	88	74	83	83	88	79	78	84	80	71	78	78.8
	Minimum	47	43	53	54	41	41	49	55	44	39	42	49	54	57	56	59	53	38	45	50	56	63	60	56	54	61	55	56	62	57	58	51.8
Berea	Maximum	67	86	87	75	67	74	72	72	68	70	80	71	82	90	85	78	76	70	60	82	81	75	77	78	81	80	74	73	72	63	73	75.5
	Minimum	47	45	58	55	45	42	61	54	61	38	45	58	53	58	72	44	50	35	47	55	66	62	60	62	55	63	56	63	61	60	56	54.4
Farmers	Maximum	75	83	82	70	66	70	73	74	70	71	81	74	84	82	85	84	83	63	63	83	86	76	76	80	84	82	72	77	79	72	70	76.5
	Minimum	39	38	58	54	44	40	57	54	45	38	42	58	57	51	56	62	50	36	48	52	59	62	59	55	53	63	52	56	58	59	61	52.1
Maysville §§	Maximum	72	82	84	66	66	71	79	74	61	71	80	74	83	78	83	84	57	64	60	68	84	76	73	81	85	77	70	77	77	74	77	74.5
	Minimum	41	42	56	55	41	42	46	48	43	43	41	45	56	56	57	53	48	37	41	42	42	62	54	57	53	56	48	49	58	56	55	49.1
Middlesboro	Maximum	75	83	82	80	71	78	75	75	72	74	75	69	80	86	89	85	70	74	68	80	83	80	83	81	82	79	76	75	77	73	69	77.4
	Minimum	48	46	57	56	42	46	62	56	45	41	47	57	58	54	57	63	57	42	51	60	57	63	60	59	57	60	62	61	65	57	58	55.0
Mount Sterling §§	Maximum	68	78	84	70	67	72	72	73	64	71	78	71	82	78	87	85	60	60	64	82	83	77	74	81	81	81	71	78	76	68	76	74.6
	Minimum	42	44	57	57	43	44	55	53	46	41	50	54	56	59	59	62	50	40	46	50	59	63	61	60	56	56	52	55	67	57	58	53.3
Richmond §§	Maximum	68	85	83	65	65	74	70	72	66	72	83	71	83	83	90	84	60	68	65	83	83	74	78	78	83	78	76	80	73	68	74	75.3
	Minimum	50	50	59	57	44	50	51	53	46	44	49	56	54	60	61	68	50	40	45	59	68	63	63	64	59	63	54	60	63	56	59	55.4
Weeksbury	Maximum	72	85	75	74	68	82	77	81	86	79	80	71	79	81	85	86	84	69	65	85	86	80	87	87	85	84	79	79	76	78	80	79.5
	Minimum	51	52	45	56	48	43	46	48	54	39	45	56	57	54	57	55	56	41	49	53	60	63	59	59	57	58	58	57	56	57	55	53.0
Williamsburg §§	Maximum	85	80	86	70	76	79	70	63	55	72	80	72	84	89	94	89	68	78	73	86	87	84	87	85	88	80	83	87	76	78	76	79.3
	Minimum	48	48	46	56	43	47	56	58	51	48	47	51	58	54	59	61	57	41	51	50	68	64	48	51	60	52	59	65	68	57	58	54.2

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain.
No Rain

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

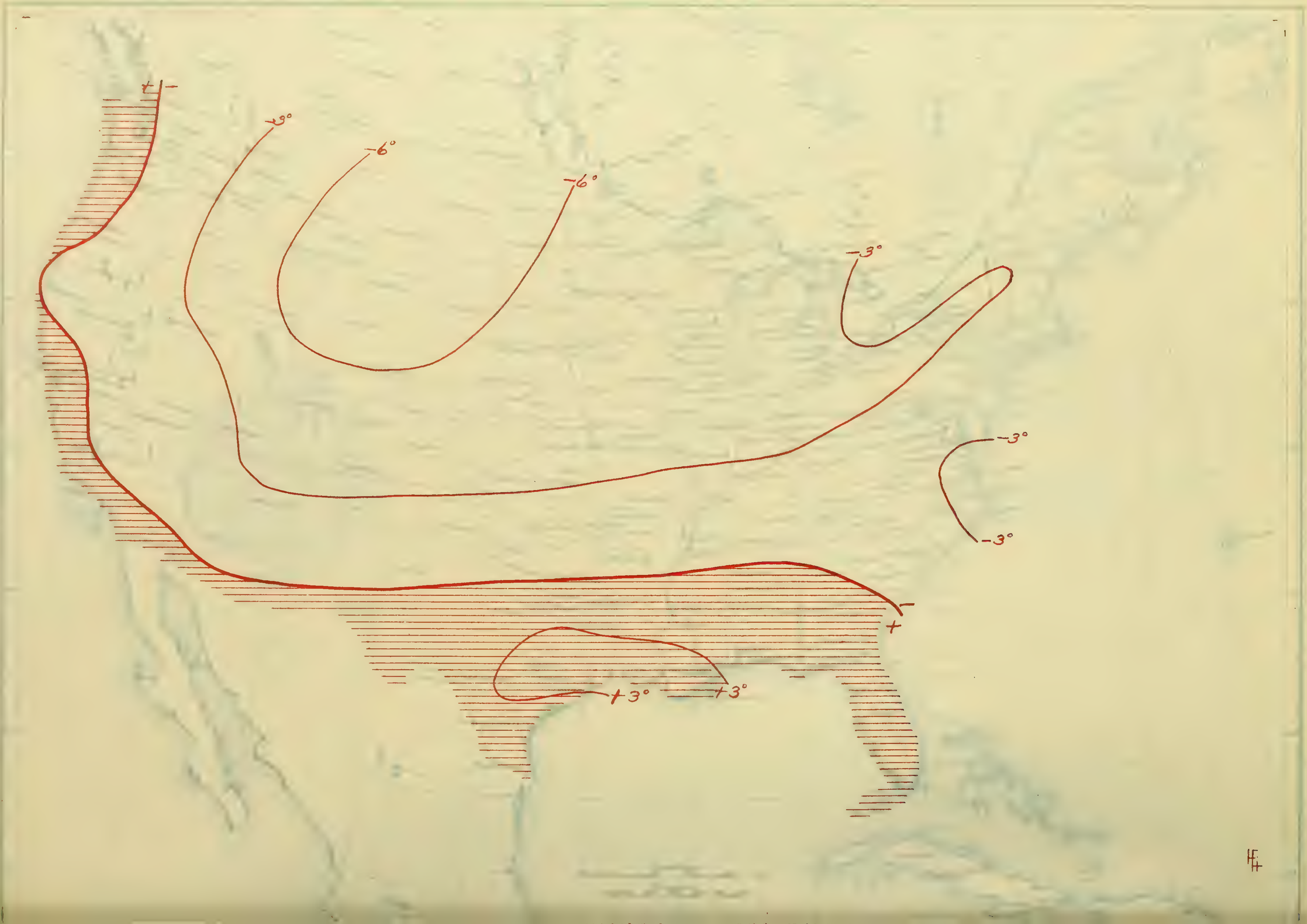
KENTUCKY SECTION

JUNE, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 22, 1915

Departure of the Mean Temperature from the Normal, June, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., June, 1915. No. 6

GENERAL SUMMARY.

Cloudy, rainy and unseasonably cool weather, which prevailed so largely during May, continued during the greater portion of June. While minimum temperatures did not register as low as they have in a number of past Junes of record, maximum temperatures kept remarkably low, and the highest reached, 95°, equals the record in the State for June in this respect. Rains were numerous, and heavy on several days and in some portions of the State, but at a number of stations the total amount for the month was below normal, and the average for the State as a whole was only 0.57 inch above the normal for June. The month was remarkably favorable for transplanting tobacco plants, and for all growing crops, especially gardens, pastures, grasses, corn and oats. But the large number of rainy days greatly interfered with harvesting wheat and hay, the cultivation of corn and tobacco and all farm work. Much corn was planted late, besides, as there had been considerable overflowing of lowlands, much replanting was necessary. Also, owing to continued rains lands became packed and grass and weeds were exuberant. A period of fair weather from the 22d to the 27th gave an excellent opportunity for harvesting wheat, and by the end of the month this work was practically completed and some threshing done. Considerable damage was done in various localities by rain, wind and hailstorms, and there was a number of fatalities and some destruction of property from lightning.

PRESSURE.

The more important disturbances affecting this section during the month were the low pressure formations of the 5-7th, 12-13th, 18-19th, 21st, and the 28-30th; and the high pressure formations of the 8-10th, 14-17th, and the 22d-27th.

The mean sea-level pressure, based on the records of two stations, was 29.98 inches. The highest was 30.18 inches at Louisville on the 10th, and the lowest 29.71 inches at Lexington on the 2d.

TEMPERATURE.

The mean temperature for the State, as determined from the records of 36 stations, was 71.7°, which is 2.2° below the June normal, the departures at the various stations varying, however, between +0.4° at Shelby City and −3.5° at Bowling Green. The average temperature of the State ranks fifth from the lowest on record for Kentucky in June during the past 27 years, while a maximum temperature of 95° is the same as that for June, 1912, which is the lowest State maximum of June for the same period of years. The highest temperature reached in the State during the first six months of 1915 was 96°, April 25. At Louisville the highest temperature reached up to July 1 was 89°, equalling the record in this respect which occurred in 1886. The lowest temperature during the month in Kentucky, 42°, has been surpassed in June in numerous past years.

PRECIPITATION.

The average precipitation for the State, based on the records of 47 stations, was 4.79 inches, which is 0.57 inch in excess of normal. The rainfall at the various stations ranged between 9.18 inches at Eubank and 1.99 inches at Blandville. In general the rainfall was greatest over the central counties, where the amounts ranged between 5 and 9 inches, and least over the extreme western portion of the State and in the regions near Louisville and Lexington, where there were from 2 to 3.5 inches. Rains were more or less general on two-thirds of the days, the longest period of fair weather being from the 22d to the 27th inclusive. There were many heavy rains in various localities, 24-hour amounts ranging between 1 inch and 2.25 inches; but 2.62 inches in 24 hours, the 28-29th, at Leitchfield, was the only excessive 24-hour rainfall.

WIND.

The total wind movement at Louisville was 6226 miles, and at Lexington 5652 miles, the average hourly velocity being 8.6 and 7.8 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 56 miles per hour from the northwest on the 20th, and at Lexington 36 miles per hour from the west on the 13th.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 82 per cent. and at 7 p. m. 72 per cent., which is the highest on record for June during the past 27 years.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 66 and at Lexington 56.

MISCELLANEOUS.

The most important items of storm damage over the State during the month are as follows:

June 3.—Much damage to crops was caused by a severe hail and windstorm in Pulaski County.

June 11.—A daughter of James Robinson was killed by lightning near Epworth, Lewis County.

June 14.—Louis Hefner was killed by lightning about 10 miles south of Hawesville.

June 19.—A local storm near Ghent, Carroll County caused considerable damage to buildings and killed many pigs, lambs and chickens.

June 21.—Wind, thunder and rainstorms were general over the State, but were heaviest and most damaging in the middle western counties. At Ferndale, Bell County, Miss Emily Baker was killed by lightning. Several buildings near Morganfield were struck by lightning, a large barn being destroyed. Barns, fences and gardens were destroyed in Simpson and Warren Counties. Several head of cattle were killed by lightning near Flemingsburg and also in the vicinity of St. John. Crops were badly damaged in Daviess and Hardin counties.

(Continued on next page.)

Comparative Data for June

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	70.6	−3.3	99	38	5.27	+1.05	..
1890	78.4	+4.5	101	51	4.96	+0.74	
1891	77.1	+3.2	97	51	4.48	0.26	
1892	75.8	+1.9	101	48	4.23	+0.01	
1893	73.3	−0.6	97	46	4.64	+0.42	
1894	75.6	+1.7	102	35	2.69	−1.53	
1895	75.9	+2.0	104	47	3.63	−0.59	
1896	73.5	−0.4	98	46	4.64	+0.42	10
1897	73.4	−0.5	101	41	3.61	−0.61	9
1898	76.2	2.3	101	45	3.90	−0.32	9
1899	76.1	2.2	100	44	2.80	−1.42	8
1900	73.9	0.0	100	40	6.14	+1.92	14
1901	75.6	+1.7	104	42	3.97	−0.25	9
1902	73.4	0.5	101	39	4.75	+0.53	11
1903	68.6	−5.3	96	37	3.61	−0.61	10
1904	73.2	−0.7	99	48	3.14	1.08	11
1905	71.8	0.9	106	45	4.49	+0.27	10
1906	73.9	0.0	99	42	4.53	+0.31	11
1907	70.2	3.7	95	41	4.91	+0.69	11
1908	73.4	−0.5	102	43	4.36	0.14	7
1909	74.5	+0.6	99	43	5.03	+0.81	14
1910	70.0	3.9	99	36	5.20	0.98	10
1911	75.2	1.3	106	45	4.06	−0.16	10
1912	70.2	3.7	95	38	3.48	−0.74	10
1913	75.0	+1.1	107	38	2.87	−1.35	7
1914	78.3	+4.4	108	45	2.30	−1.92	5
1915	71.7	−2.2	95	42	4.79	+0.57	12

Climatological data for June, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	72.0	− 1.0	89	20	51	9	31	4.50	+0.97	0.86	0	13	10	12	8	NW	W. T. Austin.
Blandville	Ballard	445	33	73.8	− 1.1	92	20	51	8	30	1.99	−2.84	0.61	0	8	11	16	3	SW	E. W. Horr.
Calhoun	McLean	437	11	73.5	− 1.6	93	6†	48	8	34	3.86	+0.34	1.46	0	13	5	19	6	SW	W. A. Taylor.
Earlington	Hopkins	420	24	73.2	− 2.4	94	6	49	8†	37	4.37	+0.84	2.10	0	10	19	3	8	S	Brick Southworth.
Hopkinsville	Christian	524	18	73.2	− 2.0	92	6†	51	9	36	5.74	+1.46	1.65	0	11	10	8	12	E	W. F. Randle.
Marion	Crittenden	571	17	73.0	− 1.9	91	20	48	8	30	3.47	−0.18	1.55	0	9	13	12	5	SW	B. C. Paris.
Owensboro	Daviess	479	17	72.2	− 2.1	89	6	51	8	30	5.77	+2.25	2.06	0	13	12	7	11	S	Henry S. Berry.
Paducah	McCracken	341	26	.....	.....	.....	.....	.....	.....	.....	3.20	−1.71	1.36	0	7	.....	.....	.....	.....	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	71.0	− 2.1	85	11	50	9	22	6.79	+1.75	1.25	0	10	11	4	15	W	W. W. Hicks.
Anchorage	Jefferson	700	13	71.4	− 0.6	89	25†	46	10	38	3.51	−0.14	1.22	0	11	18	10	2	SE	C. E. Barret.
Bardstown	Nelson	637	17	73.2	− 1.4	93	20	48	10	40	5.02	+0.67	1.65	0	13	12	7	11	SE	Chas. M. Talbott.
Bowling Green	Warren	500	25	72.4	− 3.5	91	11†	48	9	37	4.94	+1.23	1.22	0	10	13	14	3	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	.....	.....	.....	.....	.....	.....	.....	6.36	+1.98	1.88	0	11	.....	.....	.....	.....	K. W. Massey.
Cloverport	Breckenridge	375	1	.....	.....	.....	.....	.....	.....	.....	5.28	.....	2.25	0	16	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Lee Ray.
Eubank	Pulaski	1177	20	69.2	− 1.9	87	13	45	9†	41	9.18	+5.10	2.00	0	12	9	5	16	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	73.2	− 0.1	95	26	48	10	40	5.83	+1.71	1.04	0	13	7	14	9	S	Geo. L. Barnes
Franklin	Simpson	691	20	73.4	− 1.5	90	11†	52	9	27	2.60	−1.37	0.92	0	11	0	24	6	NW	J. E. Newman.
Greensburg	Green	581	22	72.4	− 1.1	90	20	47	10	38	5.10	+0.57	1.60	0	14	11	6	13	E	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	.....	.....	.....	.....	.....	.....	.....	3.63	−0.86	0.75	0	13	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	17	72.4	− 1.2	88	13	53	8	28	4.51	+0.39	1.98	0	9	12	8	10	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	71.4	− 1.5	89	20	49	9†	34	6.24	+2.25	2.62	0	11	11	17	2	NW	John E. Stone.
Lexington	Fayette	989	30	70.2	− 3.0	86	26	51	9	26	3.20	−0.79	0.73	0	13	10	11	9	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	70.4	− 2.4	87	20	46	10	33	6.22	+1.58	1.02	0	18	11	11	7	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	42	72.6	− 2.4	88	26	54	8	26	3.11	−1.12	0.80	0	12	5	13	12	NW	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	530	5	72.4	.....	90	13†	48	10	35	3.00	.....	0.90	0	12	12	9	9	NW	Wm. I. Hunt.
St. John	Hardin	777	18	70.6	− 1.7	89	20	46	10	34	6.83	+2.83	2.10	0	12	12	6	12	.....	Sisters of Loretto.
Scott	Kenton	900	17	69.8	− 1.9	89	17	47	24	34	4.84	+1.44	0.75	0	14	8	19	3	S	E. B. Wilson.
Shelby City	Boyle	1087	20	72.0	+ 0.4	90	26	46	10	40	5.28	+1.46	1.25	0	15	14	13	3	SW	H. F. Ewing.
Shelbyville	Shelby	825	25	71.2	− 2.7	92	18	48	9†	34	4.54	−0.16	1.79	0	13	11	10	9	S	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	70.5	− 1.9	87	19†	46	10	34	5.17	+0.21	1.42	0	15	10	9	11	SE	E. D. Bourne.
Williamstown	Grant	943	12	70.0	− 0.4	88	13†	46	10	34	3.32	−0.94	0.85	0	10	14	6	10	.....	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	71.9	+ 0.1	93	11	45	24	40	4.84	−0.04	1.78	0	12	13	16	1	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	70.8	− 1.7	88	11†	45	10	37	5.01	+0.13	1.84	0	12	21	9	0	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26	.....	.....	.....	.....	.....	.....	.....	4.80	+0.64	1.82	0	10	.....	.....	.....	.....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25	.....	.....	.....	.....	.....	.....	.....	5.20	+0.98	1.09	0	12	13	9	8	W	J. V. Oldham.
Farmers	Rowan	668	8	70.0	− 1.4	91	4	42	24†	40	5.32	+1.33	1.74	0	7	22	1	7	.....	Lee Craycraft.
Hazard	Perry	.....	1	.....	.....	.....	.....	.....	.....	.....	3.49	.....	0.90	0	10	.....	.....	.....	.....	Kelly E. Watts.
Jackson	Breathitt	776	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
London	Laurel	1190	0	.....	.....	.....	.....	.....	.....	.....	7.16	.....	1.39	0	13	10	3	17	S	C. R. Lee.
Louisa	Lawrence	584	10	.....	.....	.....	.....	.....	.....	.....	5.14	−0.41	2.00	0	9	.....	.....	.....	.....	G. M. Guerin.
Manchester	Clay	1400	3	.....	.....	.....	.....	.....	.....	.....	5.93	.....	1.87	0	9	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	70.7	− 2.2	91	13†	45	24	38	4.98	+0.20	1.45	0	14	13	11	6	E	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	70.0	− 2.2	86	19	50	24	31	5.33	+0.79	1.66	0	11	15	15	0	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	24	71.6	− 0.8	90	13†	49	10	36	4.51	−0.47	1.05	0	11	7	16	7	W	H. Clay McKee.
Pikeville	Pike	634	8	.....	.....	.....	.....	.....	.....	.....	2.78	−1.53	0.66	0	11	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	22	71.9	− 1.5	90	27	51	10	31	3.93	−0.01	1.09	0	14	10	10	10	S	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	71.0	.....	90	13	45	24	38	4.90	.....	1.60	0	8	21	3	6	S	O. A. Lund.
Williamsburg	Whitley	939	18	72.6	− 0.9	92	12†	51	9	33	4.62	+0.07	0.85	0	12	14	9	7	W	N. C. Jones.
State averages and extremes		.....	.....	71.7	− 2.2	95	26	42	24	41	4.79	+0.57	2.62	0	12	12	10	8	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

MISCELLANEOUS—Continued from page 43.

June 29.—Mrs. Hardin Atherton was killed by lightning near Roanoke, Larue County.

Good stages prevailed in the streams of the State and in the Ohio during the month.

Daily Precipitation for June, 1915.

STATIONS.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																	
Beaver Dam ‖	G		.60			.04	.86	T.					.46	.03		.19				.01	.27	.80	.04						.22	.70	[illegible]		[illegible]
Blandville	M	T				.33		T.				T	.06		.11				T	.06		.49			T			.24	.37	.03	T		[illegible]
Calhoun	G		.14			.34	.09	.15				T	T	T	T	.15		.02	.03		.06	1.46						.02	[illegible]	[illegible]	[illegible]		[illegible]
Earlington ‖	G		.37	T.	T.	.26	.22						.14		.02	.89		.07				2.10	.23							[illegible]			4.37
Hopkinsville ‖	C		.54				1.65		.20				.40		.20	.95				.10	.50	.70	.35								.15		5.74
Marion	O	T				.05	.21					T.		T.	T	.50		.09	T	.28	T	1.55						.35	T.	[illegible]	[illegible]		3.47
Owensboro	O		.04	.10		.25	.22	T.	.02				.05		.10	.05				.42	T	1.42							.04	2.06	1.00		[illegible]
Paducah ‖	O														.18	1.36		.22				.76							[illegible]	.08	.21		[illegible]
Central Division.																																	
Alpha	C	.30	T.			1.10	.75	.65				T.	.23		T	.86			1.25		T.	.75						.05	T	.85	T.		6.79
Anchorage	O	T.	T				T	.04						.22	.18	.05			1.22	.05	.97	.23							*	.51	.04		3.51
Bardstown ‖	S		.43	.11			.20	.41	.12				.07		.08	.59				.28	.04	.30								.74	1.65		5.02
Bowling Green ‖	G	T	T.			T.	.68	.35	.12				1.22		T.	.20				1.15	.45								.65	T.	.12		4.94
Burnside ‖	C	.10	T.				.30	.11	.43	T.			.18		T	1.14	T.			.67	T.	1.08	.14							.33	1.88		6.36
Cloverport ‖	O	.01	.24	.02		.07	.05	.01	T.				.03		.42	.10	.01			.29	.28	2.25							.42	.70	.38		5.28
Edmonton	G																																
Eubank	C		.40					.12	1.50				.09		.12	.90				1.32	1.04	1.35	.15							2.00	.19		9.18
Frankfort ‖	K.	.43	.83	.50			.06	.51	.03				.11		T	.70				.48	.50	.14								1.04	.50		5.83
Franklin	G.	T.					.14	.10				.09		.07	T.	.30			.08	.32	T.	.92			.06			.02		.50			2.60
Greensburg ‖	G.		.09				.23	.02	.15				.45	.02		.76	.02			1.60	.06	1.24	.09						.01	.36			5.10
High Bridge ‖	K.	.10	.29	.04				.08	.06				.35		.12	.75				.61	.52	.25								.26	.20		3.63
rvington	O.	.23	T.			.18	.07	T.						.12	.32						.81	1.98						.11	T.	.69			4.51
Leitchfield	G.	T.				.25	.19	T.				.05		.33	.75				.25		.26	1.52						.02	.92	1.70			6.24
Lexington ***	K.	.55	.20				.03	.42			T.	.26		.03	T	.37			T.	T.	.39	.10	.01						.19	.50	.15		3.20
Loretto	S.	.12	.34	.02		1.02	.01	.54	.02			.54	.08	.07		.97				.03	.51	.73	.01						.05	.81	.35		6.22
Louisville***	O.	.61	T.			.14	.01	.13				T.		.11	.06	.04			.43		.80	.26							.13	.39	T		3.11
Do. (Cherokee Park)	O.	.18	T				.03	T.						.27	.02	.05			.50	.04	.90	.26							.05	.50	.20		3.00
t. John ‖	S.		.20			.05	1.50	.18	.05							.25				.55	.50	2.10	T.						.05	.10	1.30		6.83
cott	L.	.46	.07					.37				.38		.55	.18	.75			.63	.45	.17	.03							.01	.74	.05		4.84
helby City	K.	.12	.08				.23	.09				.21	.47	.08		1.25			.07	.50	.96	.27							.54	.07	.34		5.28
helbyville ‖	S.	.20	.04	.09			.01		.12				.05		.11	1.79				.70	.68	.21								.32	.22		4.54
Taylorsville	S.	.18	.08			.41	.05	.70				.13		.18		.23			.29	.03	1.42	.18							.21	1.04	.04		5.17
Williamstown ‖	L.	T.	.55	.04					.30						.85	.40			.33		.28	.04								.40	.13		3.32
Eastern Division.																																	
Beattyville	K.	.08	.05	.55		.03			T.				.65	.10	T.	.46	.18			.32	.50	.14	T.								1.78		4.84
Berea	K.		.13			.08		.06				.34		.74		1.84			.30		.83	.15							.08	.03	.43		5.01
Catlettsburg ‖	B.	T.		.06				.42					.96	.04	.34	.30	.56			.10										.20	1.82		4.80
Falmouth ‖	L.	T.	.41	.39				.05	.44				.17		.13	.83				1.06	.24	.06								1.09	.33		5.20
Farmers	L.	.08	1.74					.30				.30				.98					.32										1.60		5.32
Hazard	K.	.35	.15	.10					.90				.24			.60	.80			.15	.12	.08	T.								T.		3.49
ackson ‖	K.																																
London	C.	.30	.15				.05		.97			.20				.30	.30			.70	.50	.80	.20							1.30	1.39		7.16
Louisa	B.		.12	.15					.47				1.85	.12	.08		.30				.05										2.00		5.14
Manchester ‖	K.	.21	.43		.17				1.87								.96		.11			.27	.48								1.43		5.93
Maysville ‖	O.	.17	.40	.05	.01				.24				1.28	.08	.03	.48	.04			.57	.14	.04								T	1.45		4.98
Middlesboro	C.	.28	1.66			.12		.30	.13				.27		.14	1.45				.06		.30									.62		5.33
Mount Sterling	L.	.31	.56	.15				*	1.05				.55		T.	.55	.09			.08	.65	.07									.45		4.51
Pikeville ‖	B.	.44	.12	.16					.36				.42		.04	.32	.66		T.		.08	.12								.06	T.		2.78
Richmond ‖	K.	.10	.46	.06				.08	.25				.30		.08	.75	.12			.25	.22	.08	.09							T.	1.09		3.93
Weeksbury	B.	.20	.70					.85							.30	.90	.10												.25		1.60		4.90
Williamsburg ‖	C.	.40	.25	T.			.24	T.	.43				.35	T.	.03	.85	.63			.49		.33	.17						T	T	.45		4.62

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

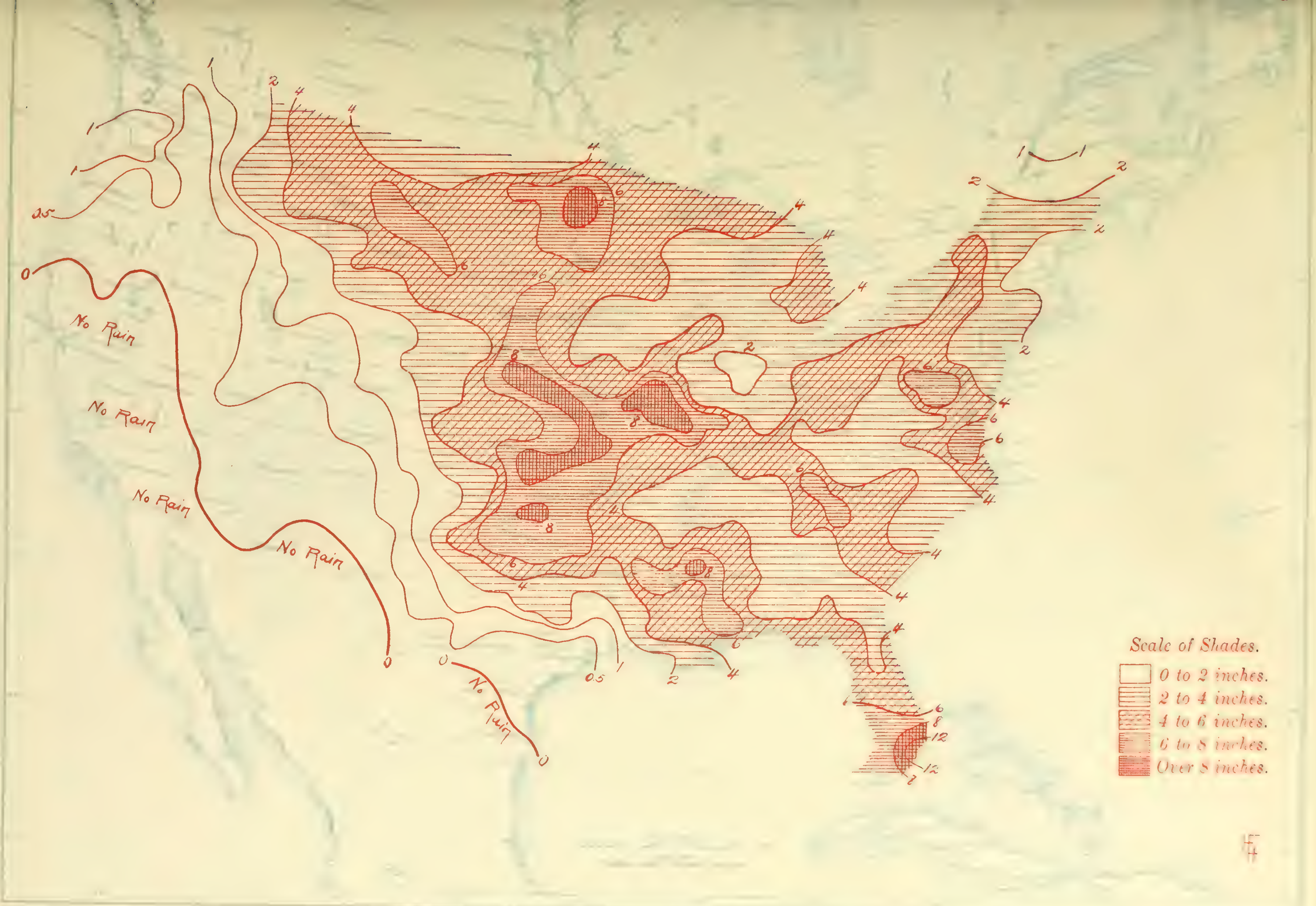
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for June, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	73	76	81	84	88	87	84	70	75	83	87	86	85	83	75	80	84	88	86	89	81	81	79	74	81	85	79	83	80	83	..	81.7
	Minimum	62	60	59	61	65	68	71	53	51	52	59	66	70	68	67	54	60	65	65	65	68	67	57	57	53	59	68	66	69	68	..	62.4
Blandville	Maximum	76	80	83	87	88	90	80	75	83	87	86	89	82	82	80	79	84	89	89	92	85	84	80	71	82	88	85	85	81	83	..	83.5
	Minimum	60	58	59	66	70	68	62	51	53	59	69	67	68	66	65	58	70	70	66	72	68	68	60	60	54	60	71	70	69	67	..	64.1
Calhoun	Maximum	77	79	85	90	92	93	90	73	78	85	87	90	88	87	79	84	88	88	89	93	86	85	84	87	86	88	83	86	83	87	..	85.7
	Minimum	61	56	59	61	64	67	69	48	52	51	64	65	69	64	64	53	57	65	64	66	66	66	57	57	52	58	67	65	67	66	..	61.3
Earlington §§	Maximum	76	79	82	88	90	94	87	75	84	89	92	91	89	88	80	83	85	91	90	92	84	85	84	78	86	93	86	90	81	87	..	86.0
	Minimum	59	56	56	59	62	67	70	49	49	52	57	67	69	67	66	51	57	60	63	67	67	67	55	55	50	56	60	65	68	65	..	60.4
Hopkinsville §§	Maximum	78	79	84	87	91	92	87	73	79	87	89	90	85	82	78	83	85	89	90	92	84	85	80	73	84	89	83	89	82	85	..	84.5
	Minimum	57	57	59	62	66	67	69	53	51	55	64	68	69	66	64	54	59	66	67	70	67	64	58	56	53	53	65	67	69	66	..	62.0
Marion	Maximum	77	78	83	87	90	90	83	71	77	86	87	89	85	82	76	81	84	87	86	91	87	82	81	75	81	85	83	87	79	83	..	83.1
	Minimum	60	58	60	67	65	68	60	48	56	58	68	67	66	70	63	56	59	69	64	72	67	67	59	58	51	66	68	67	68	66	..	63.0
Owensboro §§	Maximum	73	76	81	85	87	89	83	76	74	82	83	87	76	85	76	80	84	85	85	88	81	80	80	76	83	84	80	83	79	83	..	81.5
	Minimum	63	58	59	63	66	67	71	51	53	52	62	67	70	65	67	54	59	66	65	71	67	68	60	59	54	60	69	64	69	68	..	62.9
Central Division																																	
Alpha	Maximum	66	72	76	81	80	76	84	70	72	73	85	81	84	82	73	77	80	83	83	82	77	80	73	74	78	80	82	71	81	80	..	77.9
	Minimum	63	62	60	59	62	54	70	62	50	53	73	68	71	66	69	58	62	71	71	77	68	71	56	56	56	59	65	69	71	71	..	64.1
Anchorage	Maximum	76	77	81	84	85	88	87	71	78	81	84	88	88	87	81	84	84	86	85	87	81	81	81	78	89	89	88	81	76	86	..	83.1
	Minimum	61	62	56	57	65	66	64	53	48	46	61	65	66	63	60	52	58	59	62	66	67	65	53	50	51	54	63	66	66	67	..	59.7
Bardstown §§	Maximum	78	78	84	86	90	83	89	75	81	84	89	88	89	86	80	86	91	87	90	93	84	82	83	80	89	92	92	84	71	86	..	85.0
	Minimum	62	62	56	58	67	66	68	56	50	48	63	66	70	67	67	54	60	63	66	69	68	65	55	54	54	52	64	62	66	67	..	61.5
Bowling Green §§	Maximum	76	80	84	87	90	87	89	72	81	88	91	89	87	83	77	85	87	89	90	91	84	85	81	77	83	89	90	90	85	87	..	85.1
	Minimum	60	58	55	58	64	64	65	54	48	51	60	64	65	64	64	53	57	61	62	63	64	65	55	54	50	59	64	61	62	66	..	59.7
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	70	75	79	79	81	79	85	82	75	80	86	85	87	80	78	81	82	85	85	85	81	80	76	78	81	85	81	78	82	79	..	80.7
	Minimum	60	61	54	54	55	62	64	56	45	45	45	62	65	62	65	52	58	61	66	65	64	63	52	47	51	53	57	57	63	65	..	57.6
Frankfort	Maximum	81	76	83	83	85	90	90	84	80	80	88	88	90	91	80	84	87	90	90	87	89	88	87	82	83	95	91	92	91	88	..	86.4
	Minimum	59	63	56	56	65	66	67	54	50	48	60	64	69	66	60	54	57	60	58	67	67	66	54	49	54	55	61	65	66	64	..	60.0
Franklin	Maximum	73	76	80	84	89	85	88	73	78	84	90	86	85	82	75	81	82	87	86	90	87	80	77	74	78	85	79	86	82	82	..	82.1
	Minimum	63	61	62	63	69	68	71	57	52	57	67	68	68	68	67	56	62	69	69	75	67	69	60	57	55	64	70	66	71	68	..	64.6
Greensburg §§	Maximum	75	78	84	86	87	81	89	74	80	85	89	85	88	83	80	85	86	89	87	90	85	84	81	79	84	88	86	77	85	85	..	83.8
	Minimum	60	60	56	56	63	64	67	58	49	47	60	67	67	67	67	53	60	60	65	69	67	67	55	52	51	56	63	65	67	68	..	60.9
Irvington	Maximum	72	76	80	83	85	84	85	71	74	82	84	85	88	85	80	81	84	86	86	87	82	80	78	79	81	86	87	82	80	84	..	81.9
	Minimum	62	59	59	60	67	68	68	53	55	60	60	66	65	67	67	56	62	67	66	68	68	68	57	58	55	58	67	68	69	68	..	63.0
Leitchfield	Maximum	73	75	81	83	83	85	86	71	75	83	86	87	85	81	74	82	85	86	86	89	82	80	78	76	83	86	76	81	79	84	..	81.4
	Minimum	61	58	56	59	66	67	66	54	49	49	61	65	67	65	66	53	61	62	63	70	65	67	56	56	52	58	66	66	66	68	..	61.3
Lexington	Maximum	71	73	76	79	79	79	83	68	73	78	85	83	85	81	74	80	83	84	83	82	80	78	73	76	80	86	85	82	80	80	..	79.3
	Minimum	60	60	56	59	63	65	60	53	51	52	63	64	68	66	60	57	62	65	66	64	66	63	56	53	55	65	63	62	66	67	..	61.0
Loretto	Maximum	71	75	80	82	84	78	85	73	76	79	86	83	84	80	..	81	84	83	85	87	81	81	77	78	82	86	85	77	79	83	..	a80.9
	Minimum	60	61	54	55	64	64	67	55	49	46	63	63	68	66	..	52	58	58	65	67	67	67	54	50	50	54	60	63	65	68	..	a59.8
Louisville	Maximum	74	75	80	82	86	85	86	71	74	80	84	86	86	82	74	82	86	86	85	85	82	82	78	79	83	88	88	80	77	85	..	81.7
	Minimum	63	62	60	62	66	67	60	54	55	55	69	68	66	67	64	59	64	65	67	66	67	67	62	58	59	62	66	70	68	67	..	63.5
Do. (Cherokee Park)	Maximum	79	75	85	83	85	85	87	75	75	83	83	84	90	83	79	81	84	90	82	87	86	81	89	76	82	90	85	82	86	85	..	83.2
	Minimum	62	61	56	58	65	67	70	51	53	48	64	66	67	65	68	55	60	60	65	68	67	66	56	53	56	57	62	65	67	67	..	61.5
St. John §§	Maximum	74	76	81	85	85	82	86	72	77	80	87	83	85	83	77	81	86	85	85	89	82	81	78	77	81	87	85	78	78	85	..	81.7
	Minimum	59	58	55	57	62	65	68	50	48	46	56	65	66	65	66	53	56	60	62	67	66	66	54	54	51	56	58	64	67	67	..	59.6
Scott	Maximum	73	74	77	77	82	80	82	70	73	77	82	85	86	81	71	85	89	82	82	78	82	80	75	81	83	88	83	82	75	80	..	79.8
	Minimum	60	61	55	55	60	64	65	50	51	48	62	65	65	64	64	52	58	61	66	65	64	65	63	47	55	57	61	61	65	67	..	59.9
Shelby City	Maximum	73	77	82	83	83	85	85	78	78	86	88	88	89	84	78	85	86	85	89	87	83	81	79	78	87	90	89	80	85	82	..	83.4
	Minimum	60	62	57	56	66	64	66	55	49	46	63	74	69	65	65	52	59	60	66	65	66	68	54	49	52	55	61	63	65	67	..	60.6
Shelbyville §§	Maximum	73	73	80	83	83	83	85	70	76	81	86	87	88	84	76	84	87	92	85	87	82	83	77	78	86	89	87	82	77	85	..	82.3
	Minimum	61	62	55	57	64	65	67	50	48	48	60	64	66	65	65	54	58	62	64	67	67	65	53	50	53	55	60	65	65	66	..	60.0
Taylorsville	Maximum	72	76	79	82	82	83	85	72	76	80	84	86	86	83	74	82	86	85	87	84	82	81	77	77	84	87	85	79	76	84	..	81.2
	Minimum	61	62	57	56	66	66	68	52	49	46	60	65	69	65	67	52	57	58	64	66	58	65	53	50	52	54	60	63	65	68	..	59.8
Williamstown §§	Maximum	74	77	80	81	84	81	85	70	78	80	82	87	88	83	73	82	87	83	84	81	83	82	77	80	84	88	87	83	80	81	..	81.5
	Minimum	56	60	53	57	60	62	61	52	53	46	52	64	61	63	65	55	59	62	63	64	63	63	52	52	55	59	60	60	61	64	..	58.6
Eastern Division																																	
Beattyville §§	Maximum	72	81	82	85	84	84	89	77	81	88	93	88	89	85	82	88	88	89	90	88	86	85	79	81	87	89	89	87	90	84	..	85.3
	Minimum	62	63	55	54	58	60	62	58	50	48	55	62	64	64	66	56	60	57	65	62	66	64	52	45	53	51	53	57	66	67	..	58.5
Berea	Maximum	73	73	75	82	80	80	83	76	78	82	88	85	84	83	74	85	85	85	86	84	83	72	75	75	83	87	88	81	82	83	..	81.0
	Minimum	56	63	57	55	62	62	67	57	56	45	62	65	64	64	65	65	59	64	66	63	68	68	54	48	52	51	58	67	69	68	..	60.7
Farmers	Maximum	78	74	80	91	83	84	86	78	77	82	87	85	89	87	79	83	85	87	86	86	86	82	81	78	82	86	88	88	84	84	..	83.5
	Minimum	57	63	57	53	56	56	60	58	49	45	55	62	66	63	67	55	57	56	66	57	58	61	47	42	42	50	56	56	57	67	..	56.5
Maysville §§	Maximum	75	80	80	82	87	86	90	74	78	82	88	88	91	88	78	85	88	88	85	82	86	84	77	80	85	91	88	90	83	85	..	84.1
	Minimum	58	61	56	55	57	57	64	55	47	46	50	61	63	64	67	56	56	57	64	64	64	64	50	45	50	55	58	55	60	60	..	57.3
Middlesboro	Maximum	70	75	78	80	73	73	80	71	75	79	85	83	82	80	76	82	82	84	86	84	80	82	77	76	80	83	81	78	82	82	..	79.3
	Minimum	61	61	60	57	60	60	63	61	52	53	54	66	67	63	65	64	62	59	68	62	66	66	55	50	57	58	60	67	62	66	..	60.8
Mount Sterling §§	Maximum	73	76	80	83	80	84	84	75	79	82	88	86	90	84	78	85	86	86	89	86	85	83	78	78	85	90	86	86	86	89	..	83.3
	Minimum	62	62	56	55	62	65	62	55	50	49	56	55	69	69	67	55	59	61	68	65	67	62	52	48	52	54	63	63	68	68	..	60.0
Richmond §§	Maximum	70	76	79	82	83	80	87	73	76	82	89	86	89	81	76	81	86	87	86	85	82	82	78	78	83	87	90	82	81	81	..	81.9
	Minimum	62	62	58	59	62	64	67	57	52	51	65	65	69	67	65	56	62	65	67	66	65	67	55	52	55	59	65	64	68	67	..	61.9
Weeksbury	Maximum	76	77	75	79	80	87	88	88	75	82	88	87	90	83	77	79	85	89	86	86	83	86	88	83	82	86	86	85	84	81	..	83.1
	Minimum	59	60	58	54	55	57	58	59	53	50	58	63	64	64	65	62	61	59	66	60	59	57	55	45	50	54	56	64	66	65	..	58.5
Williamsburg §§	Maximum	72	80	83	84	84	81	85	76	80	84	90	92	89	83	79	83	90	87	92	90	87	85	80	79	86	89	87	78	89	84	..	84.3
	Minimum	62	63	58	56	62	69	68	61	51	52	57	67	63	61	67	60	61	60	67	64	63	67	55	49	53	56	61	59	66	69	..	60.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
No Rain
0
0.5
1
2
4
6
8
12

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

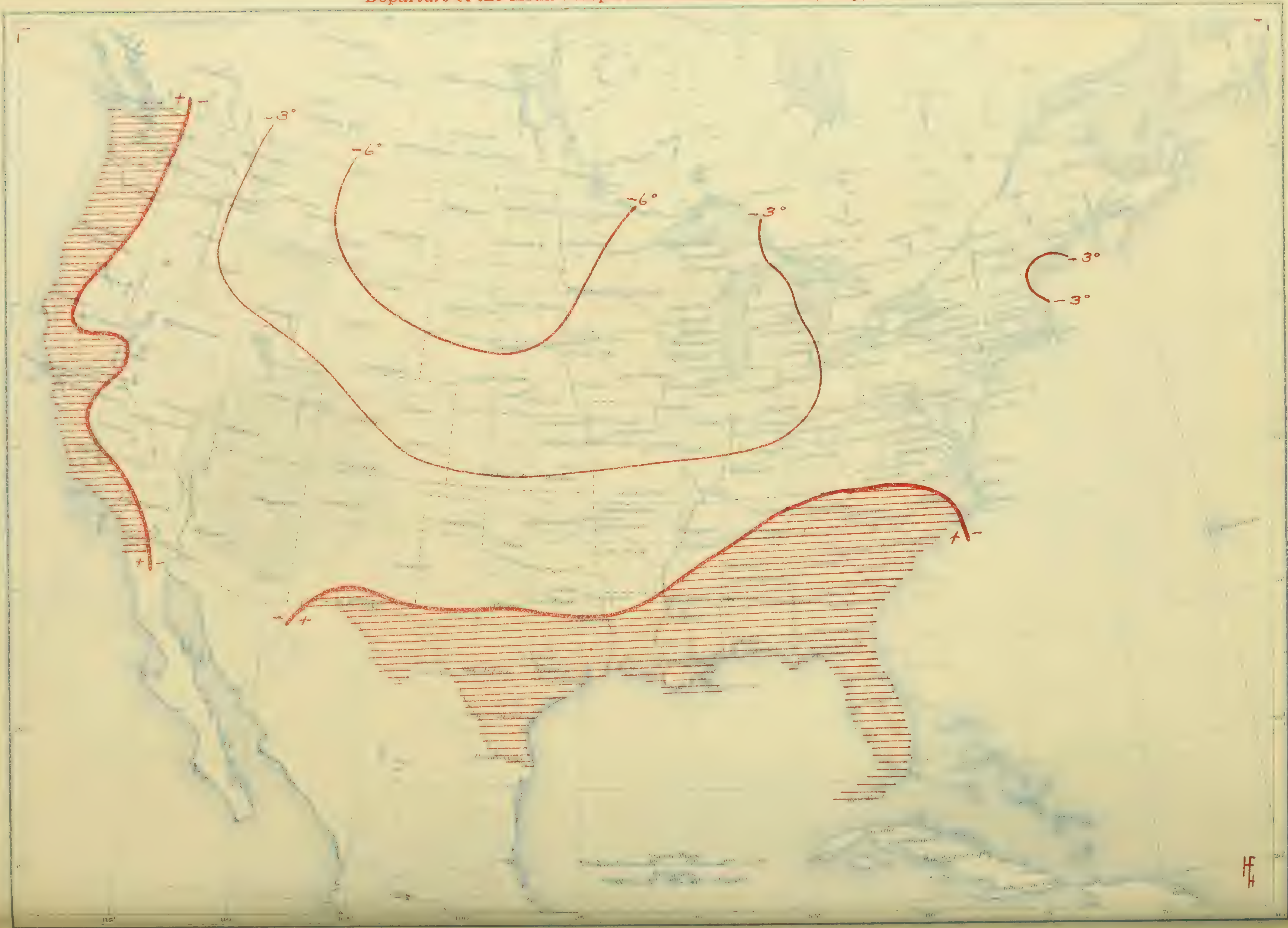
KENTUCKY SECTION

JULY, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 23, 1915

Departure of the Mean Temperature from the Normal, July, 1915.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., July, 1915. No. 7

GENERAL SUMMARY.

The weather during the first two weeks of July was remarkably rainy and cool, rains occurring more or less generally nearly every day, with many heavy damaging showers in various localities, but particularly in the central and northern portions of the State. During these two weeks excessive rains and wet weather caused serious damage to crops by the flooding of lowlands, the washing of the soil and hindering of cultivation. Wheat was badly damaged over large areas immediately before and during harvest; also continued wet weather at threshing time caused much loss. Corn and tobacco became weedy, cultivation being practically impossible in many localities. Day temperatures rarely reached 90° in any part of the State previous to the 13th. At Louisville a temperature as high as 90° was reached for the first time this year on the 14th, which is ten days later than the record for any previous year since the records were begun in 1871.

During the last two weeks, however, the weather conditions were highly favorable, being much warmer and drier with only occasional showers and one or two rainy days. But it was again quite cool in the period 21st-24th.

PRESSURE.

During the first half of the month frequent shallow low pressure areas passed over or near the State, accompanied by general and heavy rains. High pressure was dominant from about the 14th to 30th, especially high areas crested to the south or southeast of the State.

The mean sea-level pressure, based on the records of two stations, was 29.98 inches. The highest was 30.28 inches at Lexington on the 26th, and the lowest 29.65 inches at Louisville on the 7th.

TEMPERATURE.

The mean temperature of the State, as determined from the records of 36 stations, was 75.7°, which is 1.1° below the July normal. The highest, 102°, and the lowest, 49°, recorded in the State during the month, are both well within the records of past years.

PRECIPITATION.

The average precipitation for the State, based on the records of 47 stations was 5.30 inches; which is 0.95 inch in excess of normal, and is the only July of the past three with the average rainfall of the State above normal. There was a marked variation, however, in the total rainfall at the various stations, the amounts varying between 1.30 inches at Hopkinsville and 10.10 inches at Richmond. The distribution of rainfall was in general about as follows: Between 1 and 2 inches over Christian and parts of bordering counties; between 2 and 4 inches over the rest of the southwestern portion of the State and small areas in the upper Cumberland River Valley; from 4 to 6 inches over the west-central and northern portions, and from 6 to 10 inches over the central counties from the Salt River eastward to the Mountain section, and which includes the blue grass region. There was a number of excessive 24-hour rainfalls, that is, 2.50 inches or more in that time, the greatest being 5.17 inches at Berea on the 12th.

WIND.

The total wind movement at Louisville was 6801 miles and at Lexington 6391 miles, the average hourly velocity being 9.1 and 8.6 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 18 miles per hour from the northwest on the 10th, and at Lexington 58 miles per hour from the northwest on the 30th.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 79 per cent. and at 7 p. m. 62 per cent., which is considerably above the average for July for the past 27 years.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 72 and at Lexington 67.

MISCELLANEOUS.

Wind-storms and excessive rains were general during the first half of the month. The most noteworthy items of damage were as follows:

July 1.—A railroad washout and much other damage was caused by an excessive rain in Hardin County. A large barn was destroyed by lightning near Elizabethtown. Damage estimated at $25,000 was caused by wind and hail in a stretch of country about two miles wide lying just south of Louisville. Crops in that district were practically destroyed, many buildings unroofed and telephone lines prostrated.

July 4.—A severe local storm in Mercer County demolished a barn and caused considerable other damage.

July 7.—Heavy rainstorms accompanied by winds of great violence occurred over the northern counties causing much damage to buildings and telephone and telegraph lines. At Henderson a residence was struck by lightning. In Kenton and Campbell counties the property damage was estimated at $600,000. One person was killed by the collapsing of a building at Erlanger.

July 9.—A barn was damaged by lightning near Hodgenville.

(Continued on next page.)

Comparative Data for July

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	75.1	−1.7	98	50	5.62	+1.27	..
1890	73.0	−3.8	101	44	2.66	−1.69	..
1891	74.0	−2.8	91	47	4.08	−0.27	
1892	76.5	−0.3	100	48	3.30	−1.05	
1893	78.8	+2.0	101	50	3.48	−0.87	
1894	76.2	−0.6	105	43	2.03	−2.32	
1895	75.2	−1.6	99	49	5.75	+1.40	9
1896	77.4	+0.6	103	47	7.44	+3.09	11
1897	77.8	+1.0	107	50	4.79	+0.44	10
1898	77.8	+1.0	102	48	4.71	+0.36	11
1899	77.3	+0.5	100	47	3.78	−0.57	9
1900	77.9	+1.1	101	50	4.91	+0.56	11
1901	81.7	+4.9	112	48	1.72	−2.63	5
1902	78.1	+1.3	107	48	1.91	−2.44	6
1903	77.5	+0.7	104	49	3.53	−0.82	8
1904	75.2	−1.6	99	46	3.40	−0.95	10
1905	75.9	−0.9	102	52	5.93	+1.58	13
1906	75.2	−1.6	100	51	6.02	+1.67	11
1907	78.1	+1.3	102	40	4.71	+0.36	9
1908	76.9	+0.1	100	50	3.94	−0.41	10
1909	74.8	−2.0	99	48	6.01	+1.66	11
1910	76.2	−0.6	96	51	8.63	+4.28	16
1911	75.8	−1.0	105	42	2.28	−2.07	7
1912	76.8	0.0	100	53	5.50	+1.15	12
1913	79.9	+3.1	109	48	2.54	−1.81	7
1914	78.8	+2.0	109	43	3.20	−1.15	6
1915	75.7	−1.1	102	49	5.30	+0.95	11

Climatological data for July, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	76.4	− 0.8	96	30	53	6	27	3.28	−1.77	0.68	0	11	12	15	4	sw	W. T. Austin.
Blandville	Ballard	445	33	77.6	− 0.3	96	30	55	5†	29	3.85	−0.04	1.79	0	9	10	17	4	sw	E. W. Horr.
Calhoun	McLean	437	11	77.5	+ 0.5	99	31	53	6	33	4.65	−0.77	1.48	0	16	11	19	1	sw	W. A. Taylor.
Earlington	Hopkins	420	24	77.5	− 0.4	102	30†	50	6	39	2.01	−2.29	0.38	0	7	19	5	7	s	Brick Southworth.
Hopkinsville	Christian	524	18	77.7	− 1.1	100	30	52	5†	33	1.30	−2.73	0.55	0	5	14	5	12	E	W. F. Randle.
Marion	Crittenden	571	17	77.4	− 0.4	99	30	54	5	27	2.89	−1.04	0.74	0	6	15	13	3	W	B. C. Paris.
Owensboro	Daviess	479	17	76.0	− 2.0	95	31	55	5†	27	4.73	+0.88	1.90	0	9	14	7	10	NW	Henry S. Berry.
Paducah	McCracken	341	26	....	.....	.....	.....	.....	.....	.....	3.26	−0.68	1.10	0	6	....	....	....	.....	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	74.1	− 2.1	93	29†	54	6	26	4.83	−0.87	1.20	0	8	14	8	9	s	W. W. Hicks.
Anchorage	Jefferson	700	13	75.0	− 1.1	95	31	51	6	33	6.68	+2.18	1.65	0	15	19	9	3	sw	C. E. Barret.
Bardstown	Nelson	637	17	77.4	− 1.1	99	31	53	6	36	6.49	+2.01	1.10	0	13	22	4	5	s	Chas. M. Talbott.
Bowling Green	Warren	500	25	76.7	− 2.3	101	30	51	6	36	1.73	−2.61	1.05	0	8	18	13	0	s	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	....	.....	.....	.....	.....	.....	.....	3.27	−1.66	0.62	0	12	....	....	....	.....	K. W. Massey.
Cloverport	Breckenridge	375	1	....	.....	.....	.....	.....	.....	.....	5.39	.....	1.03	0	14	....	....	....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	.....	Miss Lee Ray.
Eubank	Pulaski	1177	20	73.5	− 1.2	95	31	49	6	32	6.81	+2.18	1.46	0	12	11	6	14	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	77.7	+ 1.3	98	18†	53	6	34	4.86	+0.89	0.84	0	13	9	13	9	s	Geo. L. Barnes
Franklin	Simpson	691	20	76.8	− 0.7	97	31	55	6	25	6.66	+2.55	2.83	0	8	3	28	0	sw	J. E. Newman.
Greensburg	Green	581	22	76.4	0.0	99	31	53	6	34	4.82	+0.13	1.66	0	14	6	17	8	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	....	.....	.....	.....	.....	.....	.....	9.31	+4.87	3.28	0	12	....	....	....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	17	75.8	− 1.3	95	31	54	6	26	4.90	+1.47	1.15	0	10	16	9	6	sw	W. J. Piggott.
Leitchfield	Grayson	635	19	75.4	− 1.2	96	30†	53	6	30	4.72	+0.58	1.13	0	9	17	10	4	sw	John E. Stone.
Lexington	Fayette	989	30	74.5	− 2.1	93	31	55	5	22	5.72	+1.28	2.09	0	12	11	17	3	sw	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	74.6	− 1.6	95	31	52	6	31	7.27	+3.11	1.70	0	12	12	10	9	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	42	76.1	− 2.5	97	31	56	5	24	3.73	−0.01	1.21	0	12	7	14	10	sw	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	75.4	.....	95	31	54	6	29	5.35	.....	1.95	0	12	4	22	5	sw	Wm. I. Hunt.
St. John	Hardin	777	18	74.8	− 0.9	97	31	51	6	31	5.08	+1.53	1.10	0	15	19	6	6	.....	Sisters of Loretto.
Scott	Kenton	900	17	74.2	− 2.5	96	31	53	22	30	3.92	+0.31	0.87	0	13	10	20	1	s	E. B. Wilson.
Shelby City	Boyle	1087	20	76.0	+ 1.0	97	31	52	6	34	5.69	+1.46	2.00	0	11	24	4	3	sw	H. F. Ewing.
Shelbyville	Shelby	825	25	74.8	− 2.3	94	31	52	6	31	6.69	+2.49	1.11	0	15	16	9	6	sw	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	74.6	− 1.2	94	31	52	6	32	5.61	+0.77	1.76	0	14	13	12	6	sw	E. D. Bourne.
Williamstown	Grant	943	12	74.8	− 0.3	98	17	53	5†	30	4.77	+0.33	1.87	0	7	12	5	14	.....	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	76.0	+ 0.5	99	31	52	6	35	7.71	+2.31	2.05	0	11	18	12	1	w	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	74.4	− 2.0	96	31	52	6†	35	9.52	+4.61	5.17	0	9	22	6	3	sw	C. F. Rumold.
Catlettsburg	Boyd	534	26	....	.....	.....	.....	.....	.....	.....	5.50	+0.82	1.14	0	16	....	....	....	.....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25	....	.....	.....	.....	.....	.....	.....	5.64	+1.73	2.50	0	13	8	14	9	.....	J. V. Oldham.
Farmers	Rowan	668	8	75.0	+ 0.1	95	16†	49	6	35	6.52	+1.22	2.00	0	10	23	0	8	.....	Lee Craycraft.
Hazard	Perry	.....	1	....	.....	.....	.....	.....	.....	.....	5.47	.....	1.15	0	10	....	....	....	.....	Kelly E. Watts.
Jackson	Breathitt	776	4	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	.....	.....
London	Laurel	1190	0	....	.....	.....	.....	.....	.....	.....	5.23	.....	1.25	0	13	20	2	9	sw	C. R. Lee.
Louisa	Lawrence	584	10	....	.....	.....	.....	.....	.....	.....	4.76	+1.22	1.67	0	9	....	....	....	.....	G. M. Guerin.
Manchester	Clay	1400	3	....	.....	.....	.....	.....	.....	.....	2.20	.....	0.96	0	5	....	....	....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	75.2	− 1.8	98	31	50	6	36	6.88	+2.34	2.23	0	13	14	9	8	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	74.4	− 0.3	95	31	54	6†	31	4.86	−0.64	1.60	0	11	21	8	2	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	24	75.6	0.0	95	18	53	6	31	7.84	+2.83	2.52	0	14	15	10	6	w	H. Clay McKee.
Pikeville	Pike	634	8	....	.....	.....	.....	.....	.....	.....	3.84	+0.09	0.52	0	14	....	....	....	.....	I. M. Williams.
Richmond	Madison	926	22	75.3	− 1.6	95	31	55	6†	27	10.10	+6.23	3.00	0	12	19	5	7	sw	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	73.9	.....	96	31	50	24	34	8.35	.....	2.00	0	12	21	0	10	.....	O. A. Lund.
Williamsburg	Whitley	939	18	76.2	− 0.6	97	14†	52	6	35	4.40	−1.47	1.43	0	12	17	9	5	s	N. C. Jones.
State averages and extremes				75.7	.....	102	30†	49	6	39	5.30	.....	5.17	0	11	14	11	6	sw	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

(Continued from page 51.)

July 10.—Heavy rains in Mason County caused great damage to hillsides and by carrying away small buildings along creeks; also there was some damage by wind and lightning in Louisville and vicinity.

July 11.—A church building in Hodgenville was struck by lightning and badly damaged. The bottom lands near Rockport were flooded by a heavy rainstorm and the crops damaged. At Louisville a gate tender for the Louisville & Nashville R. R. Co. was struck by lightning and rendered unconscious, and a fire was started by lightning at Pleasure Ridge Park.

July 12.---Heavy rains caused washouts in Garrard County, and the inundation of a portion of the town of Lancaster. A barn was destroyed by lightning and several persons shocked near Irvington; also a barn and two silos were destroyed by lightning near Rineyville. Much damage was caused by heavy rains in Barren County, especially to hay and wheat.

July 13.---Robt. H. Crabtree was killed by lightning near Owensboro.

July 14.---Ruth Englert, a child of 6, was killed by lightning at Franklin. A barn was burned by lightning at Elizabethtown.

July 15.---One death from heat prostration was reported from Louisville.

July 30.---Two persons were stunned by lightning, many trees uprooted and considerable damage done to buildings in Louisville.

July 31.---Some damage was caused by wind and lightning at Louisville.

Good stages prevailed in the streams of the State and in the Ohio River during the month.

ERRATA.—June, 1915: Lexington maximum temperature on the 27th should be 84.

Daily Precipitation for July, 1915.

STATIONS.	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
ver Dam ‖ ....G.		.16	.10		.15			.16			.12	.13	.68	.29		.06			.57	.26												[illegible]
ndville ....M.	.15		1.35	.05				1.79			.09					.10	T.	.09	.01									T	.22			[illegible]
houn ....G.	.62	.01	.17	.59	.03		.01	.69		.03	.16	.01	1.48	T			.01		T	.06								[illegible]		.08	.21	[illegible]
lington ‖ ....G.	T	.30	.34		.38						.28	.21	T.						.10	.40									T			2.01
pkinsville ....C.			.15		.50			.10											.05	.50												1.30
rion ....O.	.30		.74	.55			T.	.62			.31						T	T	T													[illegible]
ensboro ‖ ....O.	T	.05	.05		.30			.76			.20	.10	1.90	T.	.90		.17		T	T											.34	4.73
ucah ‖ ....O.	T.		1.10		.30			.90			.50	.40							.06											T		[illegible]
Central Division.																																
ha ....C.	1.20		.45	.35			.22			.45	T.	.65			T		.91			.60												4.83
horage ....O.	1.65		.19	.54	.05			.82		.67	.38	.08	.22		.03	.05	.99		.10										T	.38	[illegible]	[illegible]
dstown ....S.	1.10	1.01	.32	.10	.18			.16			.85	.05	.83					.05		.14	.53										[illegible]	[illegible]
ling Green ‖ ....G.	.02	.18			.25			.03			.10	.05	1.05						.05													1.73
nside ....C.	.29	.12	.08	.26	.62			.38		.38	.35	.20	.37					T.		.14	.08	T										3.27
erport ‖ ....O.	.06	T.	.16	.02	1.00			.71		T.	1.03	.12	.90		.45		.30	T.	.14										.06	.02	.42	5.39
monton ....G.																																
ank ....C.	.23	.61	.06	.27	1.03			.74		.30	.13	1.42	1.46							.06	.20											6.51
nkfort ‖ ....K.	.09	.63	.08	.05	.62			.81			.59	.08	.44				.05		T.	.66										.56	.17	4.86
nklin ....G.			.14	.71				.37			.20	.09	2.83	.62						1.70												6.66
ensburg ....G.	T.	.66	.05	.15	.38			.60		.01	1.66	.85	.19				.02		.02	.03	.15								.05			4.82
h Bridge ....K.	.12	3.28	.13	.36	1.13			1.60			.59	.27	1.05								.61								.05		.12	9.31
ngton ....O.	.12		.12	.88				.87			1.15	.92	.32		.13		.20											.19			T	4.90
chfield ....G.	1.13		.12	.66			1.02				.50	.29				.03	.47	T.		.50								T			T	4.72
ngton *** ....K.	1.59		.43	.50			1.31	.78		.17	.20	.25		.02					.03	.13										.31		5.72
tto ....S.	1.07		1.01	1.29			.02	.70		.03	1.70	.20	.78			T.	.01			.39	T.							.07		T		7.27
sville*** ....O.	1.21		.20	.19			.58	.02		.23	.27	.21		.02		.27		T											T.	.44	.09	3.73
. (Cherokee Park) ....O.	1.95		.16	.30	.04			.60			.81	.08	.23		.03	.02	.25	T.												.88		5.35
John ....S.	.30	.32	.10	.05	.18			1.10			.80	.60	.60		.05		.20	.05	.01									.65			.07	5.08
....L.	.12	.02	.87	.73	.02			.47		.25	.87				T.		.20			.01						.02		.33		T.	.01	3.92
by City ....K.	.28	.68	.24		.73			2.00		.03	1.17	.06	.26				.03			.21												5.69
byville ....S.	.01	.85	.06	.13	.77			1.03			.64	.31	.40		.12		.09			.01	.10									1.06	1.11	6.69
orsville ....S.	1.15		.31	.42	.02			1.76		.22	.20	.03	.45			T.	T	.10	.06	.01						T		.61		.27	T.	5.61
amstown ....L.	T.	.08	T.	.03	.82		T.	1.40			1.87			T.			.51		T.												.06	4.77
Eastern Division.																																
tyville ....K.	.30	.60	.07	.37	.43			1.29		T.	.31	.35	2.05					.03	T.	.92											T.	7.71
a ....K.	.36	.36	.15	.20	.78			1.43			1.04	5.17	T.							.03										T.		9.52
ttsburg ....B.	.10	1.00		.14	.30			1.10	.10	.08	1.14					.04	.06			.02	.20	.06							.70	.26	.20	5.50
outh ‖ ....L.		.23	.08	.03	.83			1.50		.04	2.50			.08			.10				.12								.01	.09	.03	5.64
ers ....L.	.31	.33			.67			2.00		.55	.40		.13							.30	.80									1.03		6.52
rd ‖ ....K.	.10		.45	.90	.45			.39			.55	.60		1.15					T.	.25	.63											5.47
son ‖ ....K.																																
on ‖ ....C.	.04	.45	.05	.50	1.25			.30		.09	.80	.80	.85							.05	.05										.09	5.23
a ‖ ....B.	.05	.76	.15		.21			1.67			.70										.72								.22		.28	4.76
hester ‖ ....K.		.17			.28							.37	.96							.42												2.20
ville ‖ ....O.		.13		.40	.40			2.23		.04	2.23						.05		.05	.03							.36		.28	.22	.46	6.88
lesboro ....C.	.15		1.60	.04	.32					.90	.10	.60	.52		.08					.25										.30		4.86
t Sterling ‖ ....L.		1.00	.10	1.00	.75			2.55	.18		.40	T.	.43			.05	.35				.45								.06	.30	.25	7.84
ille ‖ ....B.	.52	.28	.08	.44	.32			.52	.06		.42	.52	.16				T.	.04		.08	.28	.12										3.84
nond ....K.	.08	1.90	T.	.62	.65			1.55			.43	.50	1.21					T.		.03	3.00								.11		.02	10.10
sbury ....B.	.10	.40	.80	.30	T.			.45				2.00	.80			.90	.20			.25	1.60									.55		8.35
msburg ‖ ....C.	.02	.05	.48	.30	1.43			.12		.70	.52	.10	.32					T.		.03	.33									T.		4.40

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of vation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

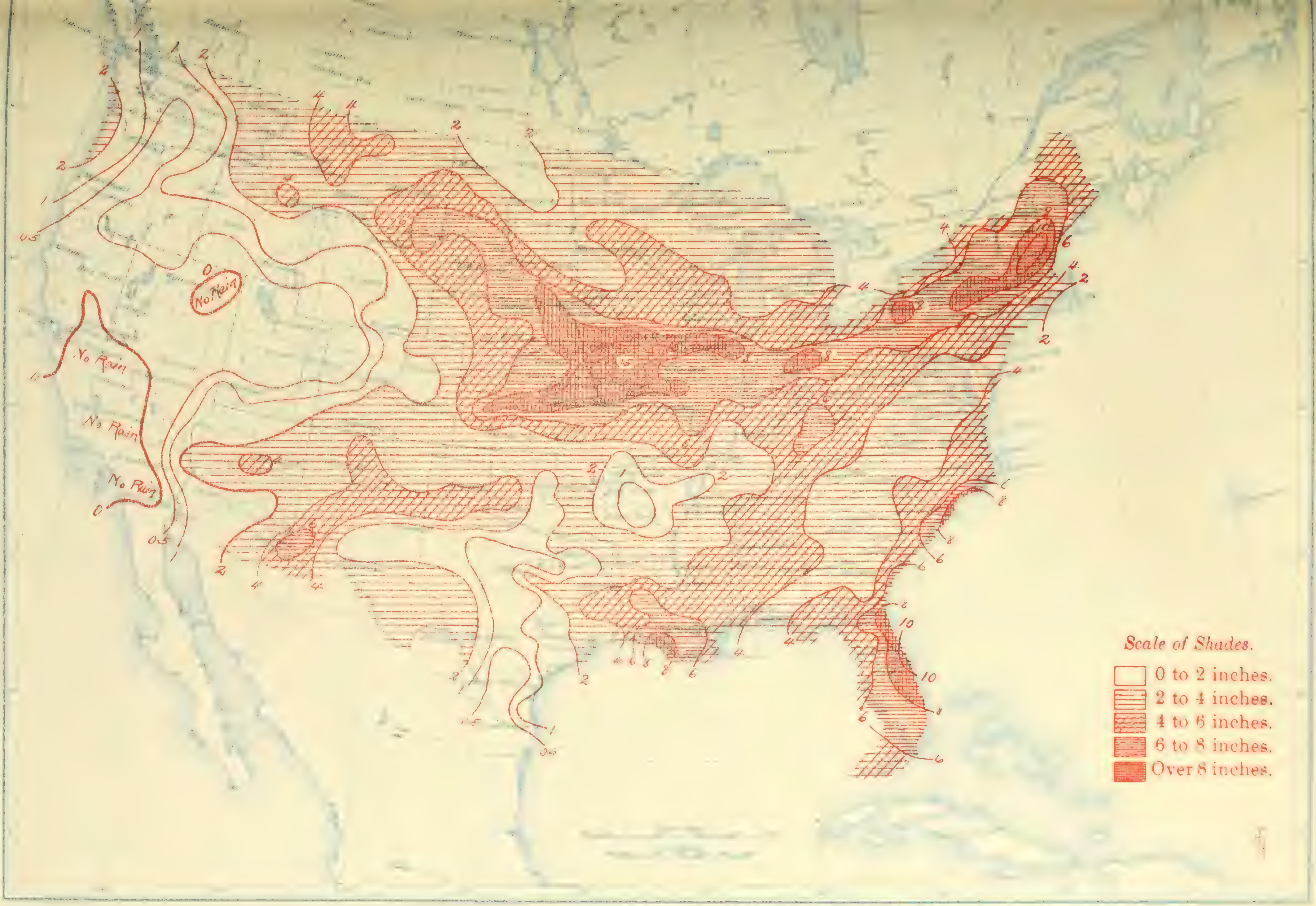
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn- (O) Ohio; (M) Mississippi.

Daily temperatures for July, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	82	83	77	83	75	79	87	77	82	90	88	88	91	87	91	91	89	89	89	83	79	80	81	84	87	89	90	92	94	96	95	86.1
	Minimum	70	63	68	62	56	53	60	69	62	65	67	79	71	73	72	74	73	74	69	72	60	56	57	57	62	64	68	68	70	76	74	66.6
Blandville	Maximum	83	82	80	81	78	79	89	82	82	90	91	87	90	91	92	92	91	92	90	83	81	82	86	88	91	93	93	94	94	96	95	87.7
	Minimum	65	62	64	62	55	55	66	67	62	71	71	77	72	77	77	73	72	69	68	69	59	59	60	60	66	64	70	72	74	74	77	67.4
Calhoun	Maximum	84	86	82	84	78	80	88	87	85	91	90	91	93	95	94	94	93	95	93	90	82	85	86	89	93	94	97	95	96	98	99	89.9
	Minimum	65	60	64	60	54	53	60	68	63	66	65	74	69	71	72	73	72	72	68	70	57	56	57	57	60	63	66	68	69	74	73	65.1
Earlington §§	Maximum	87	89	79	88	78	85	91	80	86	95	92	92	93	98	98	97	97	97	96	86	86	85	88	91	96	95	99	99	100	102	102	91.8
	Minimum	67	60	66	60	52	50	55	67	62	64	66	71	72	70	72	72	70	69	66	68	51	51	52	52	57	61	62	65	65	72	73	63.2
Hopkinsville §§	Maximum	89	87	80	84	78	83	90	84	85	93	94	92	93	96	96	96	96	96	93	87	81	82	86	88	92	93	97	96	97	100	98	90.4
	Minimum	63	60	64	62	52	52	57	65	61	65	70	71	72	72	72	72	72	71	70	69	64	57	57	55	59	62	65	68	68	71	76	65.0
Marion	Maximum	86	84	88	82	76	77	87	85	81	89	89	87	89	93	92	92	94	93	91	83	78	82	85	87	91	92	95	96	96	99	98	88.3
	Minimum	66	63	64	62	54	57	62	67	61	69	65	75	72	73	74	73	72	71	68	69	57	57	58	61	68	65	69	70	74	74	74	66.6
Owensboro §§	Maximum	80	82	83	75	74	77	86	72	82	89	87	87	88	91	90	90	88	90	88	82	78	80	82	84	87	90	90	92	94	94	95	85.4
	Minimum	70	63	65	65	55	55	63	69	65	66	66	75	70	72	72	74	71	73	70	71	59	58	59	58	60	65	64	70	71	75	74	66.5
Central Division																																	
Alpha	Maximum	76	76	73	73	71	73	81	80	80	80	83	83	81	85	85	83	86	87	83	81	73	75	71	82	85	84	86	86	93	93	92	81.3
	Minimum	69	64	66	67	60	54	57	72	66	68	74	76	70	71	75	78	75	69	73	72	63	55	55	56	60	62	65	66	69	72	75	66.9
Anchorage	Maximum	81	86	76	84	75	84	85	80	82	88	87	85	91	94	92	90	90	93	90	85	80	83	85	86	91	88	90	93	93	93	95	86.9
	Minimum	60	58	64	58	53	51	57	67	57	65	66	69	69	68	68	69	68	68	69	68	59	56	54	53	59	65	68	69	63	72	69	63.2
Bardstown §§	Maximum	85	85	78	86	78	83	87	82	86	91	88	87	92	95	94	93	92	95	95	88	84	85	81	89	93	94	93	93	95	95	99	89.1
	Minimum	65	61	65	60	56	53	61	69	61	66	66	72	70	70	72	73	71	71	72	69	61	55	56	56	61	66	66	72	71	75	73	65.6
Bowling Green §§	Maximum	95	87	81	86	80	83	91	81	85	82	92	91	90	94	95	95	94	94	93	89	82	85	87	90	94	95	95	97	100	101	99	90.4
	Minimum	65	58	62	59	54	51	58	64	60	60	66	71	67	68	67	68	70	70	68	67	58	55	55	55	58	63	62	67	67	68	73	63.0
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	80	80	76	81	79	78	84	83	83	85	86	86	86	90	89	88	87	92	87	81	72	78	81	85	86	89	90	91	92	93	95	84.9
	Minimum	63	63	64	61	55	49	56	58	60	61	65	67	67	65	70	72	69	69	69	70	52	51	52	53	55	60	60	64	65	68	71	62.1
Frankfort	Maximum	87	85	88	91	86	87	86	90	87	89	90	91	92	95	97	96	97	98	98	87	86	85	85	88	92	91	94	95	95	96	98	91.0
	Minimum	64	60	65	59	56	53	56	66	58	66	67	70	69	69	71	72	71	67	71	68	60	54	55	58	60	64	65	69	68	73	72	64.4
Franklin	Maximum	83	82	77	83	80	78	87	83	82	89	90	90	85	91	90	92	91	91	90	83	76	98	80	85	88	91	91	94	95	96	97	66.7
	Minimum	67	60	66	65	57	55	63	66	64	69	69	75	69	74	72	73	74	72	72	66	60	58	59	60	64	67	69	71	73	76	72	67.0
Greensburg §§	Maximum	84	84	80	84	78	81	86	85	86	90	89	87	88	94	93	92	90	93	91	87	81	83	84	82	91	93	93	95	96	97	99	88.3
	Minimum	67	62	67	62	57	53	56	62	61	67	66	68	70	70	70	72	70	70	72	72	60	54	54	54	57	62	65	67	63	72	73	64.4
Irvington	Maximum	82	83	77	84	74	78	85	80	81	88	85	86	87	91	90	89	88	91	89	85	77	79	81	86	87	88	88	92	92	93	95	85.5
	Minimum	66	63	65	60	56	54	63	67	61	66	67	73	69	72	72	73	72	72	71	69	58	55	58	60	61	68	68	72	70	76	75	66.2
Leitchfield	Maximum	81	83	75	81	76	79	85	78	82	89	88	84	86	92	91	91	89	90	90	83	77	79	83	84	88	90	91	92	93	96	96	85.9
	Minimum	62	62	65	60	55	53	60	67	61	68	65	73	69	70	71	71	71	71	68	69	59	56	57	56	60	60	66	67	69	74	74	64.8
Lexington	Maximum	76	80	73	81	72	78	80	77	78	84	82	82	87	89	89	89	85	92	88	81	75	78	81	86	86	86	87	90	91	87	93	83.3
	Minimum	60	61	63	59	55	56	61	63	57	64	66	69	68	70	74	75	70	75	71	61	58	58	62	65	68	71	68	74	73	70	73	65.7
Loretto	Maximum	81	81	75	82	74	78	83	80	83	86	86	84	87	91	90	90	87	90	89	84	79	80	83	84	88	88	89	91	92	93	95	85.3
	Minimum	63	62	65	63	55	52	58	66	59	65	65	71	68	68	72	73	69	69	71	63	59	54	53	53	57	62	63	69	70	74	72	64.0
Louisville	Maximum	79	83	74	83	74	79	84	75	81	88	86	85	87	92	91	90	90	92	89	83	79	80	83	84	89	88	89	93	93	92	97	85.5
	Minimum	60	62	64	59	56	59	63	67	60	66	67	72	71	73	73	68	71	73	73	66	61	61	62	61	67	70	70	74	72	73	74	66.7
Do. (Cherokee Park)	Maximum	85	83	88	82	75	83	84	88	80	87	85	85	86	91	92	90	89	90	89	87	80	80	82	84	85	86	88	90	92	89	95	86.1
	Minimum	62	61	65	58	56	54	58	68	57	66	66	71	69	76	69	79	70	69	70	68	60	55	56	55	62	65	65	71	68	71	70	64.8
St. John §§	Maximum	82	84	75	81	76	77	83	79	80	88	87	87	87	92	92	92	89	90	92	84	78	80	82	85	89	93	91	92	93	96	97	86.2
	Minimum	65	61	63	58	53	51	58	65	59	62	65	68	69	69	69	71	69	70	67	60	59	55	56	54	59	64	66	68	67	72	70	63.3
Scott	Maximum	78	82	75	81	73	78	79	78	79	84	85	85	90	90	90	90	90	90	89	84	79	78	83	84	88	88	85	85	92	86	96	84.3
	Minimum	65	60	62	56	54	54	56	66	55	63	65	72	78	70	71	74	70	66	69	66	58	53	54	54	63	68	65	67	69	72	72	64.1
Shelby City	Maximum	81	83	77	85	77	85	86	85	82	90	89	86	89	95	93	92	90	95	92	85	79	81	84	87	91	94	92	95	94	92	97	87.8
	Minimum	65	62	65	62	56	52	55	63	59	65	65	70	69	67	72	73	71	68	71	69	60	54	55	54	57	62	65	67	70	74	74	64.2
Shelbyville §§	Maximum	80	82	76	84	74	80	85	77	80	87	84	85	90	92	91	90	91	93	90	85	81	84	85	85	91	91	92	93	93	89	94	86.3
	Minimum	63	60	63	57	53	52	57	64	56	62	66	68	68	69	71	72	70	67	70	68	60	53	54	55	60	64	65	70	67	72	70	63.4
Taylorsville	Maximum	78	83	78	83	75	80	85	81	80	88	85	85	89	89	91	91	89	90	90	82	77	79	82	85	88	89	87	92	91	90	94	85.4
	Minimum	62	62	65	59	55	52	56	67	59	66	67	70	69	68	72	72	70	68	71	70	60	54	53	53	58	62	65	68	66	73	70	63.9
Williamstown §§	Maximum	78	84	74	83	75	79	80	80	81	87	85	87	92	92	91	93	98	94	91	86	80	80	80	88	89	91	91	89	94	92	97	86.5
	Minimum	63	59	62	57	53	53	57	60	53	57	64	67	69	70	71	72	68	69	64	65	56	54	56	61	64	66	65	68	68	71	71	63.0
Eastern Division																																	
Beattyville §§	Maximum	79	86	77	87	80	84	87	87	85	93	89	83	91	95	97	94	90	97	93	82	81	82	85	90	91	94	93	98	98	94	99	89.1
	Minimum	61	62	62	61	56	52	54	59	56	63	65	68	67	67	69	69	69	67	69	71	62	54	53	55	59	61	65	67	68	72	68	62.9
Berea	Maximum	82	80	75	74	76	80	77	77	81	88	87	84	87	92	92	86	89	92	90	82	76	77	80	84	90	90	87	93	93	92	96	84.8
	Minimum	64	62	64	61	57	52	56	60	59	66	65	67	67	69	73	75	73	81	71	70	60	59	52	53	55	61	59	67	67	67	72	64.0
Farmers	Maximum	80	83	80	85	76	81	85	83	81	87	87	86	90	93	93	95	92	94	93	89	80	84	84	87	88	89	91	91	93	91	95	87.3
	Minimum	61	63	61	58	56	49	56	65	54	62	66	69	69	63	69	70	71	88	66	68	58	52	53	52	57	58	58	65	67	72	67	62.7
Maysville §§	Maximum	83	86	74	88	78	84	86	78	83	90	90	91	92	96	95	95	92	96	94	85	81	83	85	89	91	92	90	92	95	88	98	88.4
	Minimum	62	62	62	61	60	50	54	68	52	54	55	69	70	65	66	79	70	65	67	66	59	52	54	55	57	62	64	64	65	69	68	62.1
Middlesboro	Maximum	77	80	77	77	75	77	81	82	83	82	86	83	82	86	87	90	90	89	91	84	78	79	82	86	88	89	90	94	91	94	95	84.7
	Minimum	63	65	61	65	58	54	55	72	68	65	65	70	67	68	70	67	67	68	68	71	63	56	54	55	58	63	64	66	67	66	68	64.1
Mount Sterling §§	Maximum	80	85	80	85	78	80	86	83	82	87	83	84	90	93	93	93	90	95	92	83	79	81	83	86	90	88	90	93	94	90	94	86.8
	Minimum	65	62	65	67	57	53	61	58	55	65	66	70	69	67	73	74	71	67	71	70	60	54	55	56	59	63	64	68	71	73	71	64.5
Richmond §§	Maximum	80	81	74	84	74	79	84	82	84	86	86	82	85	91	91	91	88	93	90	82	78	80	83	85	87	90	90	93	93	90	95	85.5
	Minimum	66	61	64	63	57	55	59	68	58	60	66	70	68	69	71	73	72	69	73	70	59	55	57	58	60	65	69	68	70	73	73	65.1
Weeksbury	Maximum	81	80	75	74	79	81	84	83	81	85	89	89	84	90	90	91	86	91	91	84	75	77	80	84	86	88	89	91	95	95	96	85.3
	Minimum	61	63	61	62	60	51	54	62	58	65	65	65	68	65	67	69	69	67	68	68	60	56	53	50	58	60	63	65	66	71	66	62.5
Williamsburg §§	Maximum	83	86	84	83	82	84	88	87	87	88	90	90	88	97	94	94	90	92	93	84	81	82	87	89	89	93	92	95	95	97	97	89.1
	Minimum	62	66	63	62	61	52	54	67	67	57	61	66	68	70	70	69	68	69	68	72	64	55	53	54	55	58	61	64	68	69	69	63.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, , etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

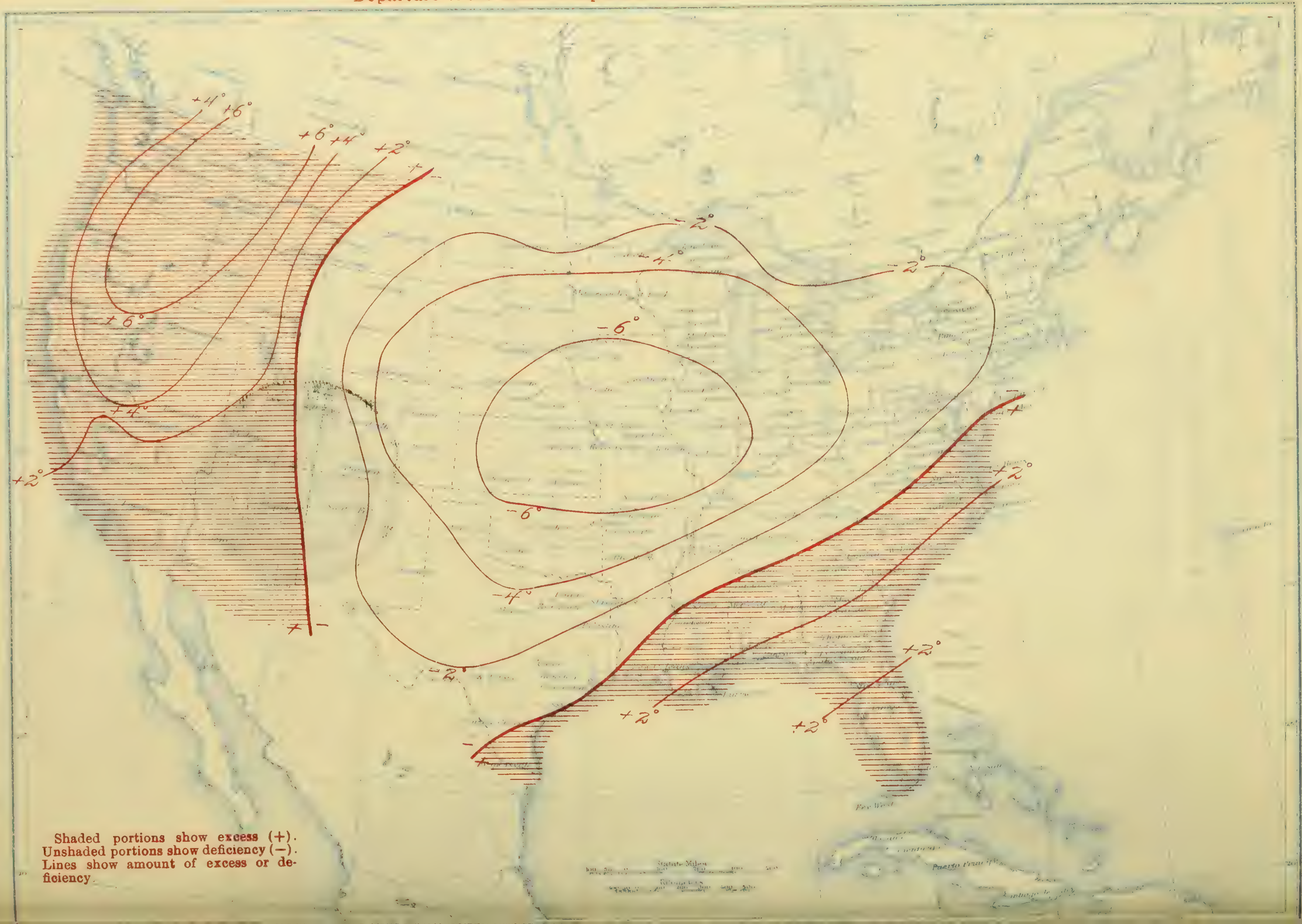
KENTUCKY SECTION

AUGUST, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 23, 1915

Departure of the Mean Temperature from the Normal, August, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., August, 1915. No. 8

GENERAL SUMMARY.

Except for a few warm days at the beginning of the month and during the second decade, the month was unseasonably cool throughout, with temperatures almost continuously below normal. Minimum temperatures during the last decade registered in the 50's on most days, while on the 31st they ranged between 42° and 50° at most stations in the central and western parts of the State, and only slightly higher in the eastern counties. August records for low temperature were broken at many stations in the northern counties. It is noteworthy that the mean temperature of each month from May to August, 1915, inclusive, has been below normal, the average daily deficiency being 2°. The average rainfall for the State for the same period was 7.16 inches in excess of the normal amount.

This month's average rainfall was the greatest on record in Kentucky for August since State records were established in 1889. Rain was very frequent, there being only a few days without fairly general showers. At two stations rain fell on 13 consecutive days.

The wet and unseasonably cold weather combined to greatly retard the development of corn and tobacco, and also interfered with harvesting the latter crop. Corn and tobacco were considerably damaged by wind in several counties during the passage of the storm of 20th-21st. Farm work was generally delayed except fall plowing, which on account of favorable soil conditions was unusually well advanced at the end of the month.

PRESSURE.

The important pressure formations of the month were as follows: The storm that appeared on the west Gulf coast on the 15th, moved inland over Texas and passed over this State on the 20th-21st, causing high winds and heavy precipitation; and the high pressure area of great strength and extent that passed over the State on the 30th-31st, causing the remarkable low temperatures of the last day.

The mean sea-level pressure, based on the records of two stations, was 29.98 inches. The highest was 30.23 inches on the 31st, and the lowest 29.51 inches on the 20th, both at Louisville.

TEMPERATURE.

The mean temperature of the State, based on the records of 36 stations, was 71.3°, which is 4.4° below the August normal and the lowest mean temperature on record for August except in 1889, when it was 70.6°. The highest, 100° at Earlington on the 1st, and the lowest, 42° at Earlington and Williamstown on the 31st, are both within past records, but in only two years, viz., 1894 and 1896, has the August minimum temperature been lower.

PRECIPITATION.

The average precipitation for the State, as computed from the records of 47 stations, was 6.29 inches, which is 2.94 inches in excess of normal. The amounts at the various stations ranged between 4.00 inches at Anchorage and 11.03 inches at Owensboro. The distribution over the State was irregular. Small areas in the extreme western and northern parts of the State, in Daviess and Hardin Counties, and in the extreme eastern counties received 8 to 11 inches. From 4 to 6 inches occurred over the west-central counties and most of the north border counties from Breckinridge eastward to the Big Sandy. Over the central counties amounts were generally between 6 and 7.5 inches. Very heavy rains occurred on several days and at a number of stations, some of the heaviest being as follows: 3.20 inches at Owensboro on the 11th, 2.97 inches at Marion on the 20th, and, 2.70 inches at St. John on the 19th.

WIND.

The total wind movement at Louisville was 7521 miles, and at Lexington 7973 miles, the average hourly velocity being 10.1 and 10.7 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 48 miles per hour from the south on the 20th, and at Lexington 39 miles per hour from the southwest on the 21st.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 84 per cent. and at 7 p. m. 68 per cent., which is highest on record for August.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 59 and at Lexington 53.

MISCELLANEOUS.

August 1.—Two mules were killed by lightning near Marion.

August 2.—A barn was burned and three horses killed by lightning near Franklin.

August 3.—The Boyd County Infirmary at Ashland was struck by lightning and badly damaged. The same bolt seriously injured Miss Ella Vorns. A local storm near Glasgow killed several head of stock, unroofed several houses and caused considerable damage to telephone lines.

August 9.—At Princess, Boyd County, lightning shattered a schoolhouse.

August 12.—A large barn was demolished by wind near Maysville.

August 16.—Lightning destroyed a barn and damaged a flour mill at Glasgow. Timber and growing crops were damaged by wind in Barren County. Lightning destroyed a large stock barn and contents, including four mules, at Smith's Grove, Warren County.

August 20. Much damage was caused to tobacco and corn in Christian and Trigg Counties on account of being blown over and beaten down by rain.

August 28.---Lightning damaged a residence in Williamstown.

Good stages prevailed in the streams of the State during the month.

Comparative Data for August

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	70.6	−5.1	100	43	1.23	−2.12	
1890	73.2	−2.5	101	44	6.16	+2.81	
1891	72.9	−2.8	105	43	5.82	+2.47	
1892	75.4	−0.3	96	45	3.13	−0.22	
1893	74.8	−0.9	99	48	1.72	−1.63	
1894	77.1	+1.4	105	41	3.02	−0.33	
1895	76.6	+0.9	102	49	2.15	−1.20	6
1896	77.1	+1.4	105	41	2.83	−0.52	5
1897	75.2	−0.5	101	49	2.33	−1.02	6
1898	76.7	+1.0	100	55	3.83	+0.48	7
1899	78.1	+2.4	102	51	3.09	−0.26	6
1900	80.4	+4.7	104	52	2.74	−0.61	6
1901	75.5	−0.2	101	50	5.12	+1.77	12
1902	75.6	−0.1	103	45	2.48	−0.87	7
1903	75.5	−0.2	100	49	3.27	−0.08	8
1904	75.2	−0.5	100	45	2.64	−0.71	8
1905	75.7	0.0	99	42	3.82	−0.47	9
1906	77.4	+1.7	99	45	4.37	+1.02	10
1907	74.8	−0.9	99	48	4.27	+0.92	10
1908	76.3	+0.6	104	49	2.79	−0.56	6
1909	76.9	+1.2	104	45	2.60	−0.75	7
1910	74.0	−1.7	100	46	2.72	−0.63	6
1911	76.2	+0.5	106	45	4.03	+0.68	10
1912	73.7	+2.0	98	43	4.71	+1.36	13
1913	78.0	+2.8	108	44	2.81	−0.54	7
1914	76.0	+0.3	100	49	5.94	−2.59	12
1915	71.3	−4.4	100	42	6.29	+2.94	11

Climatological data for August, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers
Western Division.																				
Beaver Dam	Ohio	441	11	71.9	− 4.5	92	1	47	31	26	5.84	+2.46	2.00	0	12	9	14	8	SW	W. T. Austin.
Blandville	Ballard	445	33	71.9	− 4.9	91	1	47	31	24	9.42	+6.40	2.35	0	15	9	9	13	NE	E. W. Horr.
Calhoun	McLean	437	11	72.4	− 5.3	95	1	45	31	32	4.63	+1.48	1.91	0	14	4	21	6	E	W. A. Taylor.
Earlington	Hopkins	420	24	71.8	− 4.8	100	1	42	31	36	5.27	+1.95	2.05	0	13	9	1	21	S	Brick Southworth.
Hopkinsville	Christian	524	18	72.6	− 5.2	98	1	47	31	30	4.05	+1.00	1.25	0	9	11	3	17	E	W. F. Randle.
Marion	Crittenden	571	17	72.2	− 6 4	93	1	46	31	27	6.45	+4.08	2.97	0	10	8	10	13	NW	B. C. Paris.
Owensboro	Daviess	479	17	71.2	− 5.2	90	1†	49	31	26	11.03	+7.44	3.20	0	17	13	5	13	NW	Henry S. Berry.
Paducah	McCracken	341	26								5.79	+2.83	2.33	0	13					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	71.8	− 4.3	91	1	54	26	21	7.01	+2.68	2.00	0	10	8	13	10	S	W. W. Hicks.
Anchorage	Jefferson	700	13	70.3	− 4.3	93	1	43	31	31	4.00	+0.42	1.64	0	14	12	11	8	W	C. E. Barret.
Bardstown	Nelson	637	17	70.8	− 6.4	97	1	48	31	26	6.46	+2.85	2.03	0	15	10	9	12	S	Chas. M. Talbott.
Bowling Green	Warren	500	25	72,0	− 6.9	95	1	46	31	34	6.16	+2.70	1.20	0	16	9	9	13	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								6.22	+2.11	2.00	0	15					K. W. Massey.
Cloverport	Breckenridge	375	1								5.63	......	1.53	0	16					W. A. Cockerill.
Edmonton	Metcalfe	600	23																	Miss Lee Ray.
Eubank	Pulaski	1177	20	69.4	− 4.4	92	1	50	26†	29	5.86	+1.91	1.47	0	13	5	9	17	S	Mrs. Katie Payne.
Frankfort	Franklin	560	23	73.9	− 0.8	97	1	47	31	30	5.06	+1.64	1.19	0	15	8	8	15	S	Geo. L. Barnes
Franklin	Simpson	691	20	73.2	− 4.0	93	1	50	31	26	6.44	+3.14	1.47	0	17	0	26	5	NW	J. E. Newman.
Greensburg	Green	581	22	72.0	− 3.6	94	1	51	31	30	5.30	+1.66	1.30	0	17	4	10	17	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								5.92	+2.57	1.43	0	17					Miss Lulu Wood.
Irvington	Breckenridge	646	17	70.9	− 5.4	90	16	45	31	24	5.67	+2.30	1.34	0	11	12	7	12	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	71.0	− 4.4	93	1	47	31	28	6.49	+2.82	1.96	0	12	6	17	8	SW	John E. Stone.
Lexington	Fayette	989	30	69.4	− 5.2	89	1	46	31	22	6.03	+2.46	2.98	0	15	6	16	9	SW	U. S. Weather Bureau.
Loretto‡	Marion	681	16	70.6	− 5.1	93	1	48	31	25	4.56	+1.31	1.65	0	16	4	14	13	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	71.2	− 5.3	91	1	47	31	25	4 65	+1.14	1.27	0	14	6	9	16	SW	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	70.2	......	92	1	44	31	26	5.74	......	1.27	0	15	6	12	13	SW	Wm. I. Hunt.
St. John	Hardin	777	18	70.8	− 3.9	91	1	46	31	28	9.88	+6.25	2.70	0	13	12	4	15	......	Sisters of Loretto.
Scott	Kenton	900	17	69.0	− 6.4	92	1	43	31	30	8.47	+5.56	2.28	0	15	6	9	16	N	E. B. Wilson.
Shelby City	Boyle	1087	20	71.2	− 3.1	95	1	50	31	26	7.40	+4.27	1,70	0	13	12	11	8	SW	H. F. Ewing.
Shelbyville	Shelby	825	25	70.2	− 5.3	92	1	44	31	30	5.99	+2.96	1.34	0	15	12	5	14	SW	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	70.3	− 4.2	90	1	46	31	27	5.47	+2.09	1.41	0	15	7	7	17	SW	E. D. Bourne.
Williamstown	Grant	943	12	69.6	− 4.4	93	1	42	31	32	4.91	+1.69	1.04	0	11	7	9	15	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	71.8	− 3 1	96	1	53	31	30	6 62	+1.85	0.99	0	19	4	12	15	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	70.9	− 3.7	92	1†	50	26	28	7.38	+2.44	2.12	0	16	14	6	11	SW	C. F. Rumold.
Catlettsburg	Boyd	534	26								4.10	0.00	1.12	0	15					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25								5.24	+1.80	1.97	0	13	8	2	21	......	J. V. Oldham.
Farmers	Rowan	668	8	71.4	− 2.4	92	1	50	19	32	4.94	+0.12	1.05	0	10	15	10	6	......	Lee Craycraft.
Hazard	Perry		1								9.83	......	2.10	0	11					Kelly E. Watts.
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								6 49	......	1.20	0	15					C. R. Lee.
Louisa	Lawrence	584	10								4.65	+1.00	1.17	9	14					G. M. Guerin.
Manchester	Clay	1400	3								7.16	......	1.42	0	15					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	70.2	− 5.9	93	16	43	31	32	5.52	+1.87	1.73	0	15	9	3	19	SW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	72.6	− 1.8	92	1	54	22†	30	9.60	+6.07	2.05	0	18	13	16	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	71.3	− 2.6	93	1	52	29†	28	6.54	+2.60	1.23	0	17	10	9	12	W	H. Clay McKee.
Pikeville	Pike	634	8								4.94	+1.42	1.00	0	15					I. M. Williams.
Richmond	Madison	926	22	71.6	− 4.0	91	1†	55	26	24	5.98	+2.78	1.08	0	17	9	7	15	SW	J. W. Crooke.
Weeksbury ‡	Floyd	1216	1	71.8	......	91	2†	53	23†	31	6.95	......	1.80	0	12	16	3	12	......	O. A. Lund.
Williamsburg	Whitley	939	18	73.2	− 2.9	93	1	54	27	35	7.99	+2.47	1.58	0	17	11	6	14	S	N. C. Jones.
State averages and extremes				71.3	......	100	1	42	31	35	6.29	......	3.20	0	14	9	10	12	SW	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc. T Precipitation is less than 0.01 inch rain or melted snow.

† Also on other dates. †† Received too late to be included in means and summaries.

‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for August, 1915.

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
	Day of month																															
Western Division.																																
Beaver Dam ‖ G.	.10	.55	T.								.37	.76	.05		.12			.55	.39	2.00	.35	.12		.18			T					5.54
Blandville M.	1.21	.82						.14	.64	.45	.49			.05			.11	.93	.96	2.35	.03					.45	.42		.37	T.		9.42
Calhoun G.	1.24	.15	.13	T		T		T	T	.16	.10		.03	.13			T	.18	.15	1.91	.20		.23			.01	.01		T			4.63
Earlington ‖ G.	T	T	.28					T	.01		.23	.78	.08	.45	.31			T	.29	2.05	.32			.22			.19	.06				5.27
Hopkinsville ‖ C.	.05		.80							.15	.60	.40							.50	1.25	.15						.15					4.05
Marion O.	.26	.60	.24					T.	.18	.16	.10		T	T.			T	.69	.45	2.97			.80	T		T.	T		T			6.45
Owensboro ‖ O.	.20	1.60	.01		T.		.14			.05	3.20	.46		.14	.06		.09	.73	.18	1.50	1.33	.12		.52			T			.70		11.03
Paducah ‖ O.	.10	.48	.06						.10	.40	.78				.36			.08	.62	2.33	.14						.28			.06		5.79
Central Division.																																
Alpha C.	T.	2.00							.35	.50	.75	.10		T			.91	.20	.30	.90				T			1.00	T.	T	T		7.01
Anchorage O.		.43	.02							.11	.37			.04		.14	.34	.04		1.64	.30			.13			.02		.10	.02		4.00
Bardstown ‖ S.		2.03	.37	.05			.04				.24	.06			.41		.62	.30	.15	.70	.86	.10		.08						.45		6.46
Bowling Green ‖ G.	.15	1.20	.30					.03	.02		.70	.35		1.02		T		.02	.45	.75	.28			.62			.18	.07		.02		6.16
Burnside ‖ C.	.72	T.	.61	T.					.08		2.00	.56	.10	.15	.40	T.	.08	.11	.18	.16	.30	T					.70	.07				6.22
Cloverport ‖ O.	.07	.18	.76	T.			.03			T.	.18	.05		.02	.01		.05	.87	.08	1.53	1.22	.05		.10				T		.43		5.63
Edmonton G.																																
Eubank ‖ C.	.12	.35	1.47						.12		.34	.72			.50			.60	.10	.23	1.00						.21	.10				5.86
Frankfort ‖ K.	.26	.50	.03	.17		T.					.17	.32			.36		.17	1.19	.02	.30	.79	.11		T.	.14					.53	T	5.06
Franklin G.	.15	1.47					T.	T.	.18	.23	.54	.10	T.	.10	.09	T.	.22	.23	.41	1.00			.21			.10	1.15		.13	.13		6.44
Greensburg ‖ G.	.52	1.30	.10				.21			T.	.15	.51			.40			.12	.26	.49	.54	.03		.12	.10		.12	.03		.30		5.30
High Bridge ‖ K.	.25	.53	.06	.29							1.43	.21			.02		.85	.30	.02	.25	.75	.05		.03	.59		.02			.27		5.92
Irvington O.		.90					.19			.05	1.34	.06		T.			.20	.61	.08	1.28	.24								.72			5.67
Leitchfield G.	1.68	.28								.77	.52		.05	.07			.46	.38	.14	1.48	.20		.46						T			6.49
Lexington *** K.	2.12	1.09	.03		T.					.19	.09	.01		.15		.58	.18	T.	T.	1.06	.11			.24			.03	.01	.14			6.03
Loretto S.		.32	.01				.69		T.	.04	.30		.20	.17			.60	.16	.04	1.65	.10	T.	T.	.05	T.	T.	.02		.20	.01		4.56
Louisville*** O.	.26	.11	.47	.02	T.					.18	.22			.31	T.	1.09	.15	.02	T.	1.27	.25		T.	.12			T.		.18			4.65
Do. (Cherokee Park) O.	.41	.62	.14							.31	.17	.20		.05	.02	1.27	.12	.06		1.14	.18			.12					.93			5.74
St. John ‖ S.		2.30	T.				.02				.32	.26			.11		.06	2.10	2.70	.81	.80	.06		.10						.24		9.88
Scott L.	.19	.68	1.17		T.	T.		.13	.02	.06	2.28	.09		1.19		.41	.07			1.04	.45	T.		.02					.67			8.47
Shelby City K.	1.00	1.41	.27				.35			1.70	.53	.25	.06	.36			T.	.08	T.	1.05	.11						T.	T.	.23			7.40
Shelbyville ‖ S.	.33	.82	.08	.06							.21	.05			.03		.76	.16	.02	.26	1.34	.21			.39					1.27		5.99
Taylorsville S.	.38	1.14	.10						T.	.22	.13	T.	T.	.55	.01	.02	.52	.03	.01	1.41	.19			.26					.50			5.47
Williamstown ‖ L.	.20	T.	.04	.44							.26	T.			.74		.04	.72		T.	1.04	.05			1.04					.35		4.91
Eastern Division.																																
Beattyville K.	.44	.10	.33	.56			.03			.02	.30	.99	T.	.60	.49	.03	.36	.86	T.	.03	.74	T.		T.	.05		.11	.22		.36		6.62
Berea K.	.77	.02	.78							2.12	.50	.28	.09	.63		.33	.58	.08	T.	.55	.14						.04	.25		.22		7.38
Catlettsburg B.			1.12	.32			.04	.10	.08		.06	.16			.96			.04		T.	.40	.08		.12	.06		T.	.50		.06		4.10
Falmouth L.	.56	.37	.41	.15							.33	.07			.19			.18		.08	.62	.09			1.97					.22		5.24
Farmers L.		1.00	1.05								.70					.21	.20			.33	.30			.19	.66			.30				4.94
Hazard ‖ K.	1.71		.51	T.					.32		.63	.30	T.				2.00	2.10	T.								.85	1.16	.10	.15		9.83
Jackson ‖ K.																																
London ‖ C.	1.20	.10	.40	.05							1.10	.45		.65				.22	.15	.28	.82						.45	.32	.10	.20		6.49
Louisa B.			1.17	.10					.06	.96	.08	.25	.13	.08	.36			.40			.25			.06				.50		.25		4.65
Manchester K.	.53		.37						.91		1.23	1.42					.25	.38	.51	.23	.10		.12					.87	.14	.07	.03	7.16
Maysville ‖ O.	.19	.10	.45	.15			.01		.05		.10	1.73			.64			.25			.80	.16		.20	.08					.61		5.52
Middlesboro C.	.32	.11	.97					.62	.70	.02	.90	1.65		.21		.78		.74	.04	.32	.50						2.65	.15	.02	.10		9.60
Mount Sterling L.	.16	.27	1.23	1.08							.18	.43	.10		.25		.76	.10	T.	.10	.92	.15		.08	.18			.20		.35		6.54
Pikeville ‖ B.	.16	.76	.08	.06			T		.12	.16	.72	.24	.12		.16		.08	1.00			.06						.26	.96		T.		4.94
Richmond ‖ K.	.40	.77	.12	.02			.03				.45	.22	.01		.75		.18	1.08		.23	.55	.04		T.	.64			.10		.39	T.	5.98
Weeksbury B.		1.00	.40						.20	.30	.35	.30				.35	1.80	.80									.80	.50	.15			6.95
Williamsburg ‖ C.		.95	.68	.30					.55		.11	.44	.12		.95	.26		.52	.08	.18	.25	T.			T		1.58	.64	.20	.18	T.	7.99

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

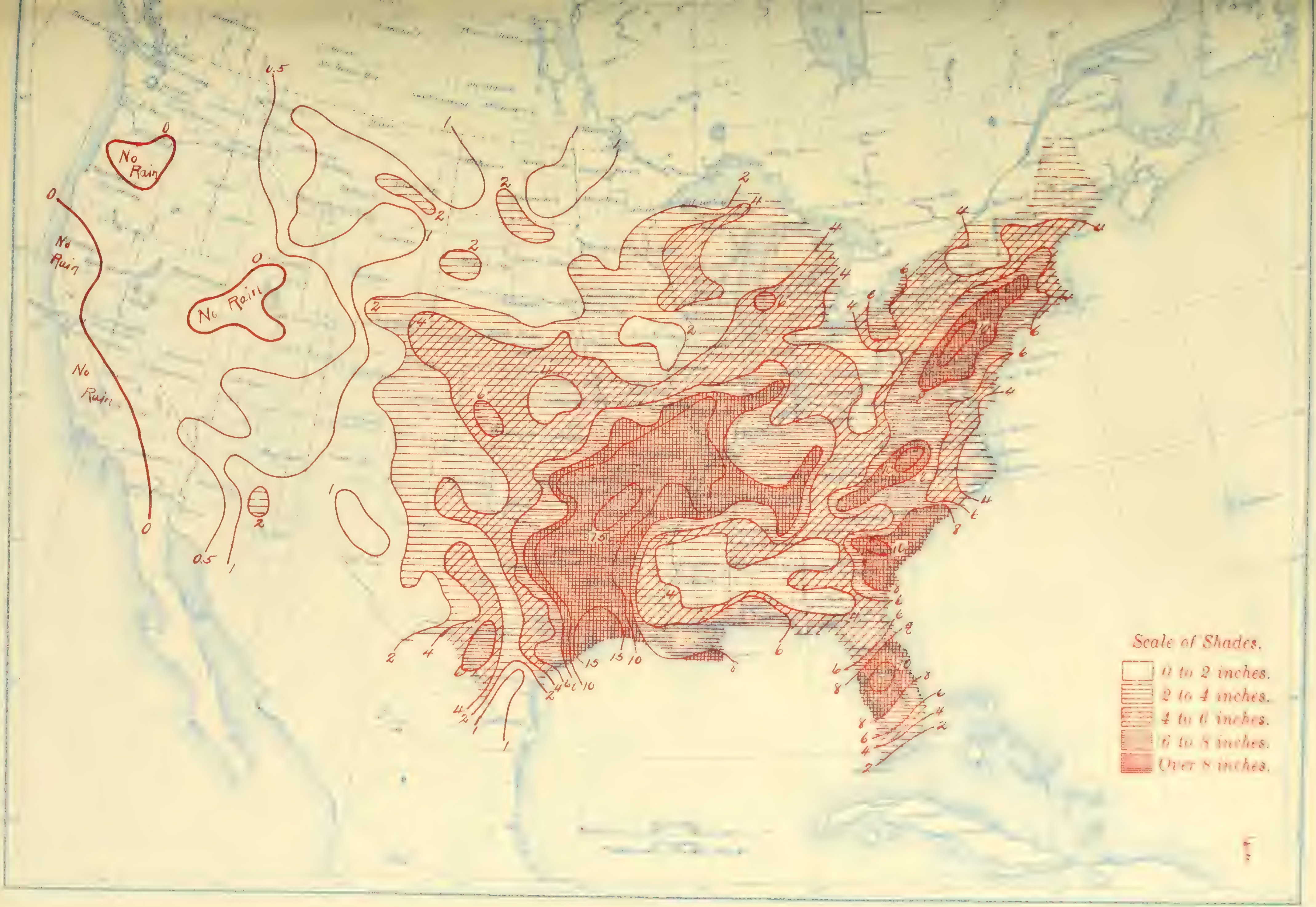
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	92	89	84	73	77	83	88	82	88	80	81	81	85	85	87	89	85	70	70	79	77	81	82	82	77	72	76	78	79	64	72	80.3
	Minimum	71	70	73	63	56	59	63	69	65	70	69	62	64	67	66	69	73	70	63	66	60	55	60	68	59	54	64	57	59	57	47	63.5
Blandville	Maximum	91	87	81	77	81	84	87	79	83	81	76	82	84	84	87	88	81	79	72	74	77	79	80	82	75	66	76	76	73	67	70	79.3
	Minimum	70	71	70	62	58	60	63	68	68	69	68	62	69	70	69	72	74	70	66	60	60	58	63	68	59	65	62	57	62	58	47	64.5
Calhoun	Maximum	95	93	84	76	80	85	92	86	93	86	80	84	90	87	93	91	88	77	67	79	79	84	82	85	80	73	79	83	77	70	72	82.9
	Minimum	69	69	72	61	54	58	60	68	64	74	69	59	63	67	64	68	72	66	62	63	60	56	57	63	56	53	63	55	57	53	45	61.9
Earlington §§	Maximum	100	96	87	75	82	89	94	85	94	84	84	85	89	86	93	94	86	73	70	78	81	85	86	86	80	73	77	83	83	67	75	83.9
	Minimum	68	68	70	61	52	55	58	59	62	67	67	59	61	63	62	65	68	69	62	62	58	52	55	58	55	51	55	52	53	59	42	59.6
Hopkinsville §§	Maximum	98	93	86	76	81	86	92	83	90	84	80	85	88	88	82	90	84	74	72	79	81	83	85	82	81	75	77	80	77	65	75	82.3
	Minimum	72	71	72	64	57	56	68	63	64	67	68	61	62	66	67	70	74	71	62	61	61	64	66	59	59	57	59	57	57	50	47	63.0
Marion	Maximum	93	92	81	74	79	84	89	84	89	79	81	83	87	86	90	81	86	76	68	76	79	82	82	84	78	78	77	81	73	67	71	81.0
	Minimum	69	70	69	61	57	61	62	69	67	69	70	61	62	68	64	71	72	67	64	63	59	59	62	67	66	56	61	55	60	55	46	63.3
Owensboro §§	Maximum	90	88	81	72	77	82	87	85	87	77	78	80	84	80	87	90	84	67	68	79	79	79	82	82	73	73	76	77	76	66	71	79.3
	Minimum	71	68	70	62	55	59	61	67	65	71	68	61	64	69	65	70	71	67	63	63	61	60	60	64	58	58	60	57	59	57	49	63.0
Central Division																																	
Alpha	Maximum	91	87	81	77	74	77	85	85	82	84	83	77	83	82	85	85	80	74	70	72	70	76	77	76	76	75	67	71	71	68	61	77.5
	Minimum	73	72	75	67	56	65	66	74	76	68	70	70	71	64	67	66	74	70	66	70	65	59	56	68	63	54	64	62	59	61	55	66.0
Anchorage	Maximum	93	91	85	76	73	83	87	85	90	76	83	79	85	84	88	90	85	70	75	77	71	81	84	83	75	74	74	79	77	61	74	80.3
	Minimum	72	68	70	62	53	62	56	66	63	68	68	66	57	63	62	65	67	61	56	61	60	56	54	66	52	50	60	57	55	49	43	60.3
Bardstown §§	Maximum	97	92	83	75	72	77	85	87	92	80	80	83	87	87	89	82	74	65	66	72	67	80	82	83	78	77	72	78	63	58	74	78.6
	Minimum	72	69	77	65	58	63	63	68	66	70	68	65	61	67	66	68	72	65	59	61	61	57	59	64	57	52	59	61	58	55	48	63.0
Bowling Green §§	Maximum	95	92	87	80	80	89	93	90	90	82	83	85	86	89	93	93	88	71	70	80	82	84	85	83	84	78	76	82	82	62	76	83.5
	Minimum	67	66	68	62	56	55	60	65	64	64	65	60	61	62	64	67	69	67	62	62	58	53	58	62	58	53	56	55	55	55	46	60.5
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	92	89	85	79	73	79	85	82	86	87	84	79	81	86	87	87	79	68	71	71	68	79	80	75	78	79	70	77	72	64	68	78.7
	Minimum	70	69	63	65	53	58	60	62	65	66	67	65	58	62	62	67	70	65	59	59	62	53	53	54	57	50	53	53	57	58	50	60.2
Frankfort	Maximum	97	95	93	90	80	85	85	90	90	92	90	86	89	90	91	94	93	80	78	80	80	80	85	88	81	83	84	83	83	70	74	85.8
	Minimum	71	70	71	65	60	64	61	60	66	70	66	64	59	64	64	64	69	62	56	61	61	60	57	65	57	53	61	63	56	56	47	62.0
Franklin	Maximum	93	92	85	80	79	86	90	83	90	85	81	82	88	91	87	87	85	74	72	79	77	82	85	80	81	78	70	76	78	69	67	81.7
	Minimum	71	71	71	65	58	60	64	70	68	69	69	62	66	69	67	72	72	68	66	66	61	58	62	67	63	59	63	58	62	58	50	64.7
Greensburg §§	Maximum	94	92	88	79	77	85	89	83	90	88	85	82	86	90	91	90	88	71	70	77	75	82	84	79	80	80	74	80	78	61	73	82.0
	Minimum	69	69	70	68	58	60	61	64	60	70	68	54	60	64	64	68	72	68	62	63	61	54	56	63	58	54	58	58	55	58	51	61.9
Irvington	Maximum	89	88	83	76	74	81	84	84	86	80	81	79	83	84	86	90	85	76	69	78	72	79	82	81	75	73	75	76	77	65	69	79.4
	Minimum	71	70	73	65	57	63	62	69	65	70	70	65	62	61	62	68	71	60	59	63	60	58	59	59	58	55	63	58	58	55	45	62.4
Leitchfield	Maximum	93	90	84	75	75	82	87	82	86	81	80	80	84	84	88	87	84	71	69	77	75	82	81	80	75	74	72	77	77	65	70	79.6
	Minimum	71	66	71	64	56	60	63	67	64	70	68	63	62	66	65	69	71	64	61	64	59	54	59	66	57	55	62	56	58	55	47	62.4
Lexington	Maximum	89	87	83	74	70	78	82	81	85	77	82	76	81	84	84	85	81	66	72	73	67	78	80	77	74	74	68	75	75	59	68	76.9
	Minimum	69	68	68	61	57	62	64	67	67	68	68	65	65	67	65	66	64	60	54	61	58	58	63	65	58	58	60	60	59	51	46	62.0
Loretto	Maximum	93	89	85	75	73	82	85	82	88	80	81	80	83	86	87	87	84	73	71	76	73	80	80	79	75	75	72	77	76	69	73	79.6
	Minimum	70	68	71	63	57	64	63	65	65	69	67	63	60	63	63	65	69	64	59	63	60	56	57	67	55	50	61	59	56	54	48	61.7
Louisville	Maximum	91	89	85	70	73	82	87	85	89	76	79	79	85	83	87	88	85	68	75	75	69	81	82	82	75	73	75	77	76	61	72	79.2
	Minimum	70	69	69	64	58	65	64	71	69	70	69	66	63	68	67	68	68	62	58	62	61	60	61	64	59	56	62	59	60	51	47	63.2
Do (Cherokee Park)	Maximum	92	87	86	80	72	81	85	85	85	83	81	79	82	82	84	87	83	74	73	75	74	80	81	81	73	72	75	76	74	63	70	79.2
	Minimum	69	68	71	64	56	62	59	68	65	68	67	65	63	64	63	65	67	61	55	60	60	58	56	67	55	53	61	57	56	53	44	61.3
St. John §§	Maximum	91	92	85	76	78	85	88	84	90	78	80	82	86	85	89	89	85	65	68	77	77	82	85	83	77	77	73	79	69	62	69	80.2
	Minimum	69	67	71	64	54	60	61	65	62	69	68	64	60	66	64	68	72	64	60	59	60	54	57	64	54	53	60	56	57	54	46	61.4
Scott	Maximum	91	86	83	77	70	79	86	83	87	75	80	75	83	78	85	89	78	68	72	70	69	80	81	80	74	71	72	79	75	62	70	77.7
	Minimum	70	69	69	64	57	62	60	67	61	67	65	65	60	61	65	63	67	56	52	59	61	50	60	64	55	52	57	60	59	53	43	60.4
Shelby City	Maximum	95	92	88	79	74	84	87	81	90	82	87	82	81	86	90	89	81	72	70	74	72	82	83	79	79	76	73	80	74	64	74	80.6
	Minimum	70	69	69	63	57	63	62	65	67	65	68	65	60	63	64	67	70	65	57	63	60	57	56	64	58	53	60	62	55	53	50	61.9
Shelbyville §§	Maximum	92	86	85	74	72	82	87	84	87	77	82	79	86	84	87	88	85	77	73	74	67	83	84	82	77	74	74	81	77	59	74	79.8
	Minimum	70	67	70	64	55	60	58	66	64	69	67	64	59	64	64	66	67	61	55	56	60	57	56	59	54	52	54	61	59	54	44	60.5
Taylorsville	Maximum	90	87	85	77	74	82	86	85	87	77	82	80	83	85	86	87	82	70	73	74	71	81	81	81	75	73	72	77	76	60	70	79.0
	Minimum	70	69	71	65	57	63	59	66	63	66	68	65	58	63	63	65	70	63	57	62	61	57	55	66	55	52	63	62	55	55	46	61.6
Williamstown §§	Maximum	93	91	86	75	73	82	89	87	90	75	84	78	81	84	88	92	87	72	74	71	64	80	84	80	79	76	74	80	78	52	74	79.8
	Minimum	68	68	68	64	56	57	60	65	63	67	65	64	58	60	63	66	67	52	49	55	58	56	62	60	54	52	57	58	57	52	42	59.5
Eastern Division																																	
Beattyville §§	Maximum	96	94	91	86	79	84	90	87	89	85	88	84	83	90	89	90	80	71	75	76	69	84	86	79	80	80	70	79	73	67	72	82.1
	Minimum	70	69	69	65	56	59	60	60	65	66	68	65	60	62	64	65	67	65	55	61	63	58	56	57	60	54	56	60	59	61	53	61.5
Berea	Maximum	92	92	86	81	74	81	85	85	89	82	87	81	78	78	88	88	79	71	71	78	72	81	81	80	78	78	66	76	74	65	68	79.5
	Minimum	70	69	70	69	57	61	61	66	68	67	67	60	60	61	64	66	68	64	58	64	62	59	55	64	66	50	60	62	58	55	51	62.3
Farmers	Maximum	92	91	88	82	77	80	87	85	86	88	86	88	87	88	87	89	85	76	75	74	72	80	84	81	79	78	78	71	79	71	72	81.8
	Minimum	87	69	68	68	54	59	55	56	58	63	65	68	67	57	61	64	66	65	50	60	62	62	52	58	58	54	61	61	53	56	52	60.9
Maysville §§	Maximum	92	85	88	82	78	81	89	87	90	84	84	80	85	90	87	93	85	71	76	71	66	83	85	82	77	79	73	79	79	60	75	81.2
	Minimum	69	70	70	65	55	59	57	57	63	64	66	65	59	60	60	64	64	58	50	50	60	59	54	55	56	55	56	60	55	55	43	59.1
Middlesboro	Maximum	92	90	88	82	76	81	85	87	84	85	84	82	85	87	86	90	84	78	74	76	80	81	82	82	83	81	77	76	74	74	71	81.8
	Minimum	71	66	68	66	56	56	55	58	66	68	67	68	62	64	63	67	69	67	66	65	68	54	54	61	63	75	63	64	59	61	58	63.5
Mount Sterling §§	Maximum	93	90	90	82	81	87	87	85	87	80	90	81	84	85	89	86	82	71	75	72	72	81	81	79	76	75	68	75	75	61	72	80.4
	Minimum	71	70	70	67	56	61	59	65	66	69	69	66	60	64	63	67	68	63	59	66	61	60	56	62	58	53	56	61	52	57	52	62.2
Richmond §§	Maximum	91	91	87	87	74	81	86	84	89	83	85	80	83	86	87	87	78	69	72	75	69	80	83	78	77	78	70	77	74	62	73	79.9
	Minimum	71	69	70	66	58	60	64	65	68	69	62	66	64	64	64	70	70	64	57	61	63	58	59	66	59	55	62	63	62	58	57	63.4
Weeksbury	Maximum	90	91	89	85	79	78	87	87	86	82	88	85	88	91	91	85	79	75	76	78	82	81	84	82	78	78	72	69	76	68	66	81.5
	Minimum	70	66	66	67	61	58	57	60	65	65	67	65	60	60	67	65	66	64	59	63	67	61	53	59	65	53	62	60	56	60	54	62.0
Williamsburg §§	Maximum	93	87	89	88	83	86	90	92	86	89	85	86	85	87	86	91	85	87	73	78	79	81	86	85	85	89	73	74	76	75	66	83.7
	Minimum	72	69	69	66	55	56	55	62	64	68	67	66	61	67	63	64	70	68	66	67	68	59	58	62	66	55	54	59	58	59	55	62.8

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

*, ¹, ², etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain
No Rain
No Rain
0
0.5
1
2
4
6
8
10
15

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

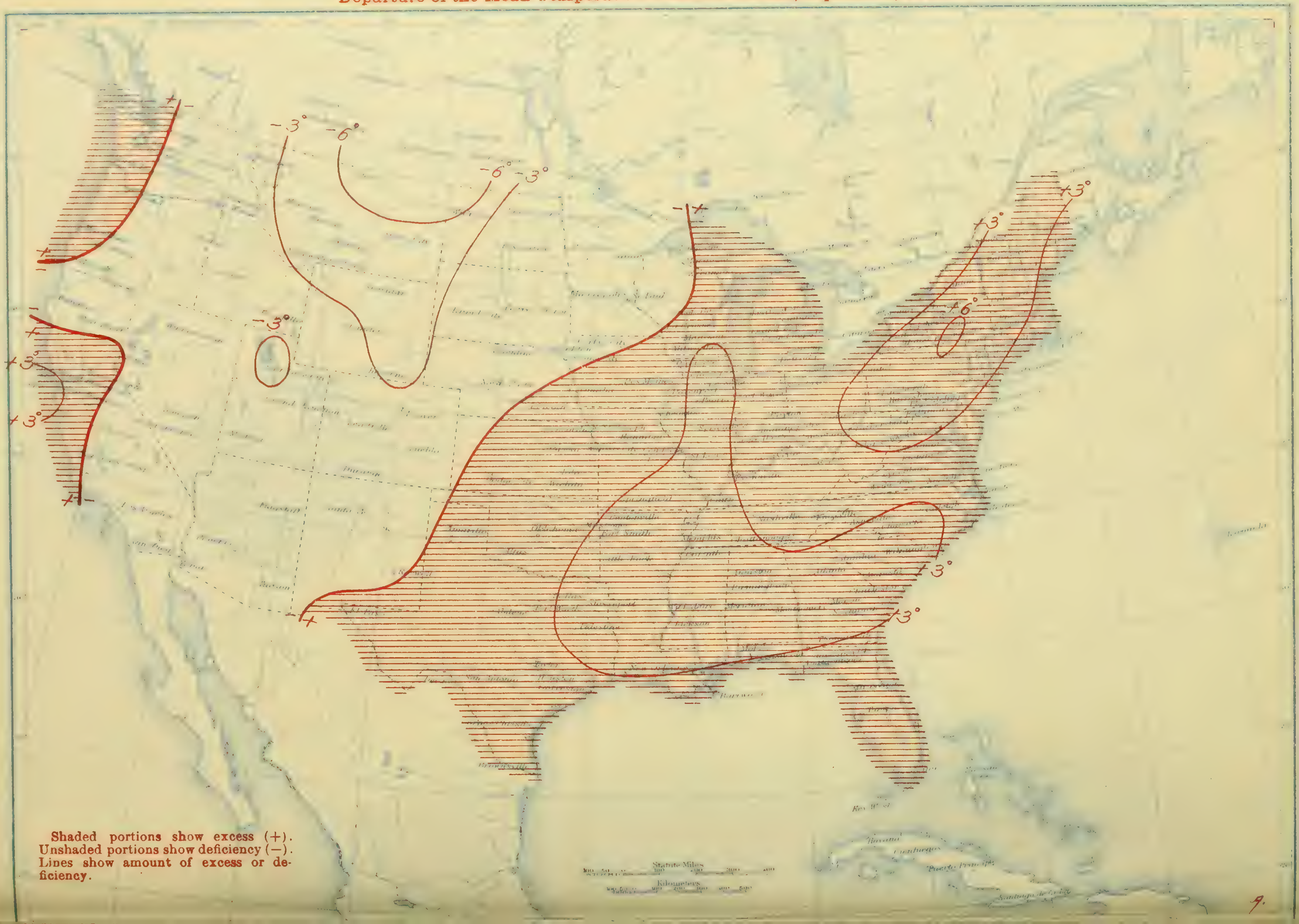
KENTUCKY SECTION

SEPTEMBER, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 23, 1915

Departure of the Mean Temperature from the Normal, September, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

9.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XX. LOUISVILLE, KY., SEPTEMBER, 1915. No. 9

GENERAL SUMMARY.

As a whole the month was favorable for the maturing and harvesting of the staple crops, and for the preparation of soil for fall seeding, except that the last decade was too cool to properly develop late corn. During the first week temperatures were generally below normal, but warmer weather set in on the 7th and continued to the 20th, maximum temperatures during this period registering generally above 85° at all stations. Temperatures in the 90's prevailed generally during the week beginning with the 11th. A decided change to colder occurred on the 21st, and, except the period 24-26th, temperatures were considerably below normal during the rest of the month. Light frost was reported from a few stations on the 22d, but there was no damage.

Precipitation averaged somewhat above normal and was fairly well distributed over the State. There was much bright, clear weather and only a few local storms during the month, and farm work was well advanced at the close.

PRESSURE.

The principal pressure features of the month were the high pressure area that moved over this section on the 21st-22d, causing the low temperatures and light frosts on the latter date; and the tropical disturbance that moved inland on the middle Gulf coast on the 29th, and passing northward caused the heavy rains over the central and southern portion of the State on the 30th.

The mean sea-level pressure for the State, based on the records of two stations, was 30.08 inches. The highest was 30.42 inches on the 22d at Louisville, and the lowest 29.63 inches on the 30th at Lexington.

TEMPERATURE.

The mean temperature for the State, based on the records of 36 stations, was 70.7°, which is 0.1° above normal and only 0.6° below the mean temperature for August, 1915. The extremes were not unusual for September, the highest being 99° at Earlington on the 13th and the lowest 32° at Weeksbury on the 23d. Weeksbury is a mountain station and quite elevated. Minimum temperatures generally over the State ranged between 38° and 46° on the 23d.

PRECIPITATION.

The average precipitation for the State, as determined from the records of 47 stations, was 3.32 inches, which is 0.62 inch above normal for September. Amounts at the various stations ranged between 1.31 inches at Louisa and 10.15 inches at Alpine. Over the northeastern counties the monthly amounts were generally less than 2 inches, while over the rest of the State they ranged between 2 and 5 inches except in a few localities. Most of the rainfall occurred as local showers, which were heavy at some stations on the 5th, 20th, 29th and 30th. There were three principal periods with rainfall, 5-6th, 17th-21st and 27-30th.

WIND.

The total wind movement at Louisville was 7152 miles, and at Lexington 8338 miles, the average hourly velocity being 9.9 and 11.6 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 38 miles per hour from the west, and at Lexington 39 miles per hour from the northwest, on the 18th at both places.

HUMIDITY.

At Louisville the average relative humidity at 7 a. m. was 81 per cent. and at 7 p. m. 65 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 74 and at Lexington 64.

MISCELLANEOUS.

A barn was destroyed by lightning near Mt. Sterling on the 19th.

Good stages prevailed in the streams of the State throughout the month.

ERRATA.—August 1915: Lexington, maximum temperature on the 14th should be 85; mean maximum temperature for the month should be 77.0, and the monthly mean temperature 69.5.

Comparative Data for September

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	72.1	+1.5	101	36	1.23	−1.47	..
1890	67.0	−3.6	95	36	2.71	+0.01	..
1891	69.5	−1.1	97	42	1.89	−0.81	..
1892	68.5	−2.1	93	38	2.68	−0.02	..
1893	69.6	−1.0	99	35	3.24	+0.54	..
1894	71.7	+1.1	98	37	2.71	+0.01	..
1895	73.4	+2.8	101	27	1.10	−1.60	3
1896	68.6	−2.0	100	30	3.77	+1.07	7
1897	72.8	+2.2	105	37	0.21	−2.49	1
1898	73.4	+2.8	103	42	4.36	+1.66	9
1899	68.7	−1.9	105	27	1.66	−1.04	5
1900	74.6	+4.0	102	35	2.25	−0.45	6
1901	68.1	−2.5	98	33	3.57	+0.87	6
1902	67.3	−3.3	97	29	4.01	+1.31	10
1903	69.1	−1.5	100	32	0.91	−1.79	4
1904	71.1	+0.5	99	34	2.58	−0.12	8
1905	70.2	−0.4	95	36	2.61	−0.09	6
1906	73.0	+2.4	95	45	6.15	+3.45	13
1907	69.1	−1.5	102	35	3.00	+0.30	6
1908	71.6	+1.0	101	30	1.03	−1.67	3
1909	67.7	−2.9	97	32	2.51	−0.19	6
1910	71.8	+1.2	99	38	4.41	+1.71	9
1911	74.3	+3.7	99	46	3.71	+1.01	10
1912	71.0	+0.4	103	33	2.80	+0.10	7
1913	69.6	−1.0	106	29	2.49	−0.21	9
1914	67.8	−2.8	97	36	2.96	+0.26	6
1915	70.7	+0.1	99	32	3.32	+0.62	7

Climatological data for September, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	71.8	+ 0.6	93	13	40	22	33	3.31	+0.70	2.00	0	8	18	9	3	s	W. T. Austin.
Blandville	Ballard	445	33	72.6	+ 1.6	91	13	44	22	26	4.94	+1.96	1.62	0	5	15	11	4	NE	E. W. Horr.
Calhoun	McLean	437	11	73.3	+ 0.5	97	13	41	22	36	4.76	+2.18	1.46	0	7	8	19	3	sw	W. A. Taylor.
Earlington	Hopkins	420	24	72.6	+ 2.6	99	13	40	23	46	1.95	−1.10	0.74	0	5	23	3	4	s	Brick Southworth.
Hopkinsville	Christian	524	18	72.8	+ 0.9	95	13†	41	22	37	2.60	−0.43	1.55	0	5	22	0	8	E	W. F. Randle.
Marion	Crittenden	571	17	72.3	+ 0.4	94	16	42	22	31	3.34	+0.30	1.59	0	4	17	10	3	sw	B. C. Paris.
Owensboro	Daviess	479	17	71.4	+ 0.7	92	13	46	22	30	3.27	+0.45	1.66	0	8	19	3	8	s	Henry S. Berry.
Paducah	McCracken	341	26	......	......	......	......	......	......	......	3.76	+0.77	1.05	0	5	......	......	......	......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	70.4	− 0.3	87	12†	44	22	31	10.15	+6.99	3.35	0	4	18	5	7	s	W. W. Hicks.
Anchorage	Jefferson	700	13	70.6	+ 1.5	93	13	39	22	35	2.46	−0.35	1.10	0	7	22	2	6	sw	C. E. Barret.
Bardstown	Nelson	637	17	^{b}70.8	− 1.1	92^{b}	13	42	22†	35^{b}	3.58	+0.68	1.11	0	9	19	8	3	s	Chas. M. Talbott.
Bowling Green	Warren	500	25	72.8	+ 0.8	98	11†	40	22	40	2.95	−0.11	1.85	0	6	19	8	3	s	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23	......	......	......	......	......	......	......	3.31	+0.05	1.56	0	5	......	......	......	......	K. W. Massey.
Cloverport	Breckenridge	375	1	......	......	......	......	......	......	......	2.42	......	0.94	0	8	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Lee Ray.
Eubank	Pulaski	1177	20	68.8	− 0.1	91	15	38	23	40	2.52	−1.00	1.45	0	3	12	9	9	NE	Mrs. Katie Payne.
Frankfort	Franklin	560	23	71.7	+ 3.1	95	16	41	22	34	5.13	+2.29	2.05	0	7	19	6	5	s	Geo. L. Barnes
Franklin	Simpson	691	20	74.0	+ 2.0	97	13	44	22	31	4.51	+1.15	2.76	0	6	4	25	1	sw	J. E. Newman.
Greensburg	Green	581	22	71.1	+ 1.1	94	12†	39	23	40	2.51	−0.46	1.01	0	8	5	17	8	s	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12	......	......	......	......	......	......	......	2.73	−0.38	1.30	0	7	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	17	70.8	− 0.1	90	13	44	22	29	3.90	+1.07	1.02	0	7	21	4	5	sw	W. J. Piggott.
Leitchfield	Grayson	635	19	71.0	+ 1.2	92	13	42	23	31	3.94	+0.30	1.40	0	6	18	10	2	sw	John E. Stone.
Lexington	Fayette	989	30	69.5	+ 1.6	90	13	44	22	26	3.74	+1.32	1.51	0	9	15	10	5	sw	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	69.8	− 0.8	90	12†	38	23	37	4.77	+2.09	1.50	0	9	15	9	6	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	71.7	+ 1.8	92	13	46	22	31	2 34	−0.29	1.48	0	7	14	8	8	s	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	530	5	69.1	......	91	13	42	22†	34	1.56	......	0.52	0	6	17	10	3	sw	Wm. I. Hunt.
St. John	Hardin	777	18	69.9	+ 0.8	94	11†	40	22	33	2.89	−0.23	1.52	0	8	23	2	5	s	Sisters of Loretto.
Scott	Kenton	900	17	69.4	− 0.6	91	11	40	22†	40	5.20	+2.72	2.39	0	8	14	6	10	s	E. B. Wilson.
Shelby City	Boyle	1087	20	70.8	+ 1.2	96	13	40	22†	35	4.00	+0.98	1.42	0	10	20	5	5	sw	H. F. Ewing.
Shelbyville	Shelby	825	25	69.6	+ 0.1	95	13	41	23	41	3.44	+0.55	1.40	0	9	20	4	6	s	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	68.1	− 0.6	89	13	40	23	33	5.83	+2.43	2.25	0	9	14	10	6	s	E. D. Bourne.
Williamstown	Grant	943	12	69.2	+ 0.2	96	12	39	22	43	4.26	+1.17	1.50	0	6	14	7	9	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	70.6	+ 0.6	96	13†	42	22†	38	2.35	−0.43	1.00	0	8	20	4	6	sw	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	70.1	+ 0.9	90	10†	40	22†	31	1.53	−1.19	0.61	0	6	22	4	4	sw	C. F. Rumold.
Catlettsburg	Boyd	534	26	......	......	......	......	......	......	......	2.82	−0.83	0.48	0	12	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25	......	......	......	......	......	......	......	3.02	+1.05	1.03	0	8	14	9	7	s	J. V. Oldham.
Farmers	Rowan	668	8	68.8	+ 0.3	94	11	37	23	40	1.82	−1.27	1.12	0	2	17	7	6	......	Lee Craycraft.
Hazard	Perry	......	1	......	......	......	......	......	......	......	2.73	......	1.63	0	5	......	......	......	......	Kelly E. Watts.
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
London	Laurel	1190	0	......	......	......	......	......	......	......	2.72	......	1.10	0	5	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	10	......	......	......	......	......	......	......	1.31	−1.21	0.35	0	7	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	3	......	......	......	......	......	......	......	1.83	......	0.86	0	4	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	69.6	− 0.6	96	12†	39	22	39	1.80	−0.89	0.75	0	9	18	7	5	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	71.2	+ 2.4	91	12	40	22	31	3.84	+1.09	0.95	0	8	20	8	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	68.4	+ 0.8	90	13	41	23	31	2.29	−0.60	0.81	0	7	20	6	4	sw	H. Clay McKee.
Pikeville	Pike	634	8	......	......	......	......	......	......	......	1.86	−0.98	1.00	0	9	......	......	......	......	I. M. Williams.
Richmond	Madison	926	22	71.2	+ 0.6	93	12†	42	22	32	2.11	−0.53	0.98	0	8	18	8	4	s	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	66.6	......	91	15	32	23	40	2.75	......	0.85	0	5	21	1	8	......	O. A. Lund.
Williamsburg	Whitley	939	18	71.4	+ 0.8	92	13	41	22	34	3.54	+0.18	1.52	0	5	22	5	3	s	N. C. Jones.
State averages and extremes				70.7	......	99	13	32	23	46	3.32	......	3.35	0	7	17	8	5	s	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for September, 1915.

STATIONS.		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division.																																	
aver Dam	G					.13	.15												.03	.05	.15							.20		.30	2.00		[illegible]
andville	M																	.07	.68		1.25								1.32		1.02		4.34
lhoun	G			T	T	.10												1.02	.06		.57							.15	1.16		[illegible]		4.76
rlington ‖	G																			T		.48						.10	[illegible]	[illegible]	.74		[illegible]
pkinsville ‖	C										.15									.60		1.55								[illegible]	.10		[illegible]
rion	O						T	T.											.34		.61								.80		1.59		3.34
ensboro ‖	O					.15	.07	.13												.60		.42						.10	1.66	.14	T.		3.27
lucah ‖	O																			.52		1.05							.80	.64	.75		3.76
Central Division.																																	
dha	C				T.	3.35				T					T.	T.		T			1.75									2.30	2.75		10.15
chorage	O					.49		.10											.46		.13							.68	.10		1.10		[illegible]
dstown	S					.75	.16	.06											1.11	.49		.10						.05	.71	.15			3.58
wling Green ‖	G					.02	.10			T.	.05								1.85			.88								.05	T		2.95
rnside	C					1.56	.10				T.					T.	T.					1.55								.06	.04		3.31
verport ‖	O					.16	T.	.36								.03				.42		.38						.09	.94	.04			2.42
monton	G																																
ank	C					1.45	.05															.62								.10			2.22
nkfort ‖	K					2.05	.47	.75			T.								.75	.69		T.						.07	.35	.05			5.18
nklin	G					.28				.11								.04		.40	.92							T	T		2.76		4.51
ensburg ‖	G					1.01	.20				.10								.09	.20		.30								.51	.10		2.51
h Bridge ‖	K					1.30	.57												.29	.40		.03							.05	.09			2.73
ington	O					T.	.62											.13	.82		.23							.10	1.02	.98			3.90
chfield	G					.21											1.01	.38		.43									.51		1.40		3.94
ington ***	K		T.		.44	.91	.03					T.						.12	.37		.01							.18	.19		1.49		3.74
etto	S				.10	1.11		T.	T.	T.								.03		.37	.13	.03						.06	1.44	T.	1.50		4.77
isville***	O				.01	.23	T.												.22		.11							.22	.09		1.46		2.34
o (Cherokee Park)	O					.25		T.											.52	.19	.28							.18	.14				1.56
John	S					.18	.01	.31												.43		.28						.02	.14	1.52			2.89
tt	L			T.	T.	2.39	T.	1.10	.38	T.								.27	.26	T.	.01							.42			.37		5.20
lby City	K				.10	1.42	.09												.01	.47	.10	.04						T	.07	.42	.75		4.00
lbyville	S					1.00	.24	.10											1.40	.50		.05						.02	.05	.08			3.44
lorsville	S				T.	1.13											.06	2.25	.76	.09	.03			T.				.30	.14		1.07		5.83
liamstown ‖	L					1.20	1.00		1.50											.13		T.						.13	.30				4.26
Eastern Division.																																	
ttyville ‡	K					.40	.26									.05			1.00	.11		.33							.10	.10			2.35
ra	K				.61	.50	.06											.19		T.	.02							.15	T				1.53
ettsburg ‖	B			.32	.06	.48	.28	.26	.04										.40	.18		.20						.30	.28	.02			2.82
mouth ‖	L					1.03	.83		.63											.08		.02						.38	.03	.02			3.02
mers	L					1.12													.70														1.82
ard	K					.29	.35													.06		1.63								.40	T		2.73
sson ‖	K																																
don ‖	C					.72	.50																1.10							.35	.05		2.72
isa	B			.19	.06	.35	.05													.06		.35							.25				1.31
nchester ‖	K					.39	.44											.14													.86		
sville ‖	O			.02	.06	.75	.18				.31								.03	.09								.20	.16				1.80
dlesboro	C				.11	.92				.02									.13			.95							.06	.90	.75		3.84
nt Sterling ‖	L				.81	.05													.25	.55		.12						T	.45	.06			2.29
ville ‖	B			.26	.04	.12	.16				T.	T.							.04	.16		1.00						T.	.04	.04			1.86
mond ‖	K					.98	.08	.18										T.	.18	.29		.12							.10	.18			2.11
ksbury	B				.70	.70					.25																		.25		.85		2.75
iamsburg ‖	C				T	.50	.22								T.	T.						.98								1.52	.32		3.54

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of ervation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

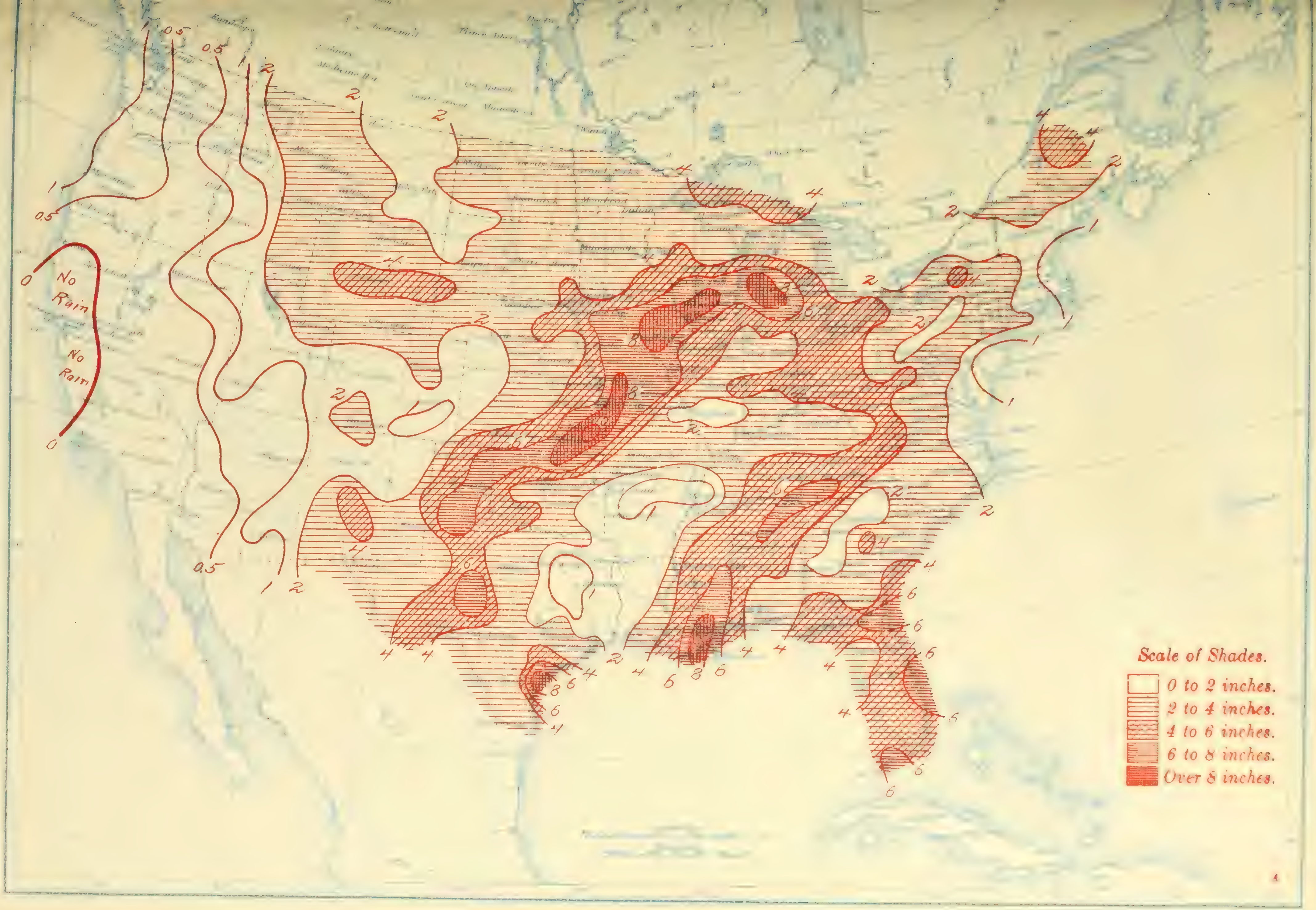
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn-
e; (O) Ohio; (M) Mississippi.

Daily temperatures for September, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	81	83	82	86	80	85	88	90	84	87	91	92	93	92	92	92	91	89	85	82	66	70	74	81	83	85	86	65	74	62	..	83.0
	Minimum	49	55	56	59	66	62	66	67	68	64	67	68	69	72	70	69	68	68	60	58	49	40	42	48	50	65	71	61	54	56	..	60.6
Blandville	Maximum	78	82	80	82	82	84	88	88	83	87	89	89	91	89	88	90	88	88	81	73	67	67	70	79	83	83	87	76	73	65	..	81.7
	Minimum	52	60	61	61	62	64	68	69	69	67	69	71	72	75	72	70	70	69	65	64	48	44	51	57	60	67	71	64	59	53	..	63.5
Calhoun	Maximum	84	88	87	90	85	89	90	94	88	91	95	95	97	94	94	94	94	92	88	82	69	73	76	84	85	86	91	83	75	68	..	86.7
	Minimum	50	55	58	59	65	62	64	65	69	63	66	66	68	70	69	68	66	68	61	59	45	41	43	48	51	66	69	59	52	52	..	59.9
Earlington §§	Maximum	86	91	88	91	86	92	93	97	89	93	98	97	99	96	98	98	95	94	90	86	68	77	75	89	89	88	91	66	67	61	..	87.9
	Minimum	45	46	52	53	57	61	64	66	67	62	62	65	67	71	72	66	67	56	55	52	61	42	40	46	43	54	63	59	53	53	..	57.3
Hopkinsville §§	Maximum	85	88	85	88	85	88	90	93	84	89	93	93	95	92	95	93	93	90	86	82	71	73	78	84	85	87	87	75	76	63	..	85.5
	Minimum	48	53	58	58	61	68	63	64	68	63	64	67	67	72	71	67	67	67	63	59	49	41	43	47	50	58	67	63	57	56	..	60.0
Marion	Maximum	81	84	82	86	85	87	89	91	86	89	92	92	81	90	92	94	92	90	74	74	68	59	70	71	85	85	88	80	74	65	..	82.5
	Minimum	50	59	58	60	63	65	68	68	69	65	69	71	72	74	72	69	70	70	63	62	46	42	46	53	56	68	70	60	53	51	..	62.1
Owensboro §§	Maximum	80	83	81	84	80	84	87	89	84	86	90	90	92	90	90	90	90	89	89	78	62	69	71	79	81	85	85	62	73	58	..	81.7
	Minimum	51	57	61	62	65	62	66	67	69	65	68	69	70	71	70	69	68	69	62	61	48	46	47	49	54	58	66	58	52	53	..	61.1
Central Division																																	
Alpha	Maximum	75	76	77	70	67	80	82	85	76	83	85	87	87	85	86	85	82	85	80	84	64	64	68	73	80	78	79	80	67	66	..	77.9
	Minimum	54	58	56	62	66	69	66	66	68	69	66	67	68	74	72	67	70	66	69	60	58	44	45	50	49	69	71	67	61	60	..	62.9
Anchorage	Maximum	83	84	83	79	73	82	87	90	87	89	91	91	93	91	91	90	90	87	86	81	67	71	71	82	84	86	76	64	66	61	..	81.9
	Minimum	53	61	62	61	69	61	63	61	65	64	67	66	68	68	69	67	66	65	64	58	48	39	40	48	49	61	57	56	58	49	..	59.4
Bardstown §§	Maximum	82	86	82	70	76	80	83	91	80	89	91	92	91	91	91	85	90	85	87	82	64	70	..	..	85	85	70	61	76	63	..	81.4
	Minimum	49	53	55	59	60	62	65	67	68	65	67	67	70	70	70	69	69	66	66	61	50	42	42	49	50	62	70	57	50	52	..	60.1
Bowling Green §§	Maximum	87	89	90	90	85	90	94	96	86	93	98	96	98	95	96	94	89	91	86	88	70	77	72	86	87	88	91	89	78	65	..	87.8
	Minimum	49	49	55	59	61	61	62	63	63	65	65	66	65	65	65	64	64	63	60	58	47	40	43	47	50	52	63	61	55	54	..	57.8
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	79	80	83	73	78	82	84	88	80	88	89	90	92	89	91	89	86	86	81	85	66	66	70	79	83	80	81	74	68	60	..	80.7
	Minimum	51	55	54	54	53	62	62	63	64	64	64	64	65	65	64	62	63	65	65	54	51	42	38	39	44	47	60	60	54	55	..	56.8
Frankfort	Maximum	80	85	86	80	79	85	88	91	93	92	93	94	93	94	94	95	93	94	92	84	80	70	76	79	82	85	87	68	75	73	..	85.4
	Minimum	48	51	57	58	65	59	60	63	60	64	66	66	67	68	69	66	66	66	65	58	50	41	42	48	48	59	58	54	48	50	..	58.0
Franklin	Maximum	80	83	83	85	80	88	91	93	79	89	94	95	97	93	93	92	93	91	83	90	69	68	78	83	85	86	91	80	76	69	..	85.2
	Minimum	53	61	59	61	66	66	68	69	71	67	69	72	71	71	71	69	70	68	63	62	51	44	47	52	54	64	68	63	57	58	..	62.8
Greensburg §§	Maximum	83	85	86	78	79	85	87	91	78	89	92	94	94	91	92	91	92	90	84	88	69	70	73	81	85	84	83	82	75	65	..	83.9
	Minimum	48	53	53	58	63	60	62	63	67	65	65	65	65	67	66	65	66	65	66	55	53	40	39	45	45	55	61	61	56	57	..	58.3
Irvington	Maximum	79	81	80	81	80	85	86	88	84	86	89	89	90	89	89	89	89	86	80	80	68	66	69	77	80	83	78	63	62	68	..	80.5
	Minimum	50	58	59	60	60	63	66	69	70	65	68	70	71	72	72	70	70	67	82	60	48	44	45	49	53	66	63	56	50	56	..	61.1
Leitchfield	Maximum	79	81	82	83	79	83	87	89	85	86	90	90	92	90	90	89	89	88	81	83	68	67	70	78	81	84	83	69	72	65	..	81.8
	Minimum	52	58	58	60	65	63	66	65	67	65	65	68	67	69	69	68	68	67	63	58	48	43	42	48	50	62	66	57	56	52	..	60.1
Lexington	Maximum	78	78	70	74	69	79	84	87	82	87	88	88	90	88	89	86	87	84	80	81	66	65	67	76	80	80	72	60	69	61	..	78.2
	Minimum	52	58	57	61	64	62	66	68	70	68	70	74	72	70	70	70	69	64	64	64	48	44	48	55	56	61	53	52	46	48	..	60.8
Loretto	Maximum	80	83	82	76	77	83	86	88	83	87	89	90	90	89	89	87	90	88	82	85	68	69	69	78	82	83	77	62	74	66	..	81.1
	Minimum	46	51	53	56	65	61	65	66	65	63	65	68	80	70	69	66	65	65	64	57	49	40	38	46	45	57	61	56	51	50	..	58.4
Louisville	Maximum	83	84	82	80	74	82	86	89	85	87	91	91	92	90	90	90	89	86	84	80	64	69	70	79	81	84	74	62	71	62	..	81.0
	Minimum	52	58	61	60	66	63	66	72	72	68	70	72	73	73	74	72	71	68	65	62	49	46	49	52	57	67	58	56	48	52	..	62.4
Do. (Cherokee Park)	Maximum	81	82	80	78	74	82	85	88	86	87	86	90	91	89	89	88	86	84	82	79	70	68	69	67	80	84	80	62	70	67	..	80.1
	Minimum	47	53	56	58	65	55	63	67	68	64	67	67	69	71	68	67	67	65	62	58	48	42	42	46	49	60	53	54	45	47	..	58.1
St. John §§	Maximum	79	82	82	80	82	84	88	91	83	89	94	92	94	90	91	89	91	90	82	84	65	68	71	79	82	85	74	61	72	63	..	81.9
	Minimum	46	55	56	59	62	59	63	63	66	62	64	66	66	67	68	65	65	64	59	57	49	40	41	46	49	56	67	56	49	51	..	57.9
Scott	Maximum	77	80	72	73	70	79	83	87	86	86	91	90	90	89	90	88	84	82	83	78	68	68	73	80	80	81	76	64	66	63	..	79.2
	Minimum	59	54	59	62	61	60	60	65	70	67	66	67	71	82	69	67	68	64	62	59	47	40	62	40	51	64	55	50	43	47	..	59.7
Shelby City	Maximum	82	84	82	74	75	84	88	91	83	92	94	95	96	92	92	93	92	89	85	83	68	71	74	81	85	83	77	64	75	61	..	82.8
	Minimum	47	52	55	60	63	61	65	65	66	65	66	67	67	67	66	67	67	67	66	57	50	40	40	47	50	63	63	56	50	51	..	58.9
Shelbyville §§	Maximum	82	83	77	73	74	83	88	90	87	91	94	94	95	93	94	90	92	87	85	82	68	70	73	84	85	85	64	61	73	63	..	82.0
	Minimum	47	52	55	57	58	60	62	65	66	64	65	67	68	67	67	67	65	65	63	58	47	39	41	43	49	53	59	54	46	45	..	57.1
Taylorsville	Maximum	78	80	78	74	74	81	84	86	83	86	88	88	89	87	87	87	88	86	79	81	70	66	69	75	79	83	73	64	70	63	..	79.2
	Minimum	46	50	53	56	65	57	63	62	65	63	65	66	65	64	63	65	64	65	63	57	49	41	40	44	46	59	60	58	48	49	..	57.0
Williamstown §§	Maximum	81	85	74	74	68	82	88	89	88	89	96	92	93	92	93	91	90	89	87	82	67	72	76	85	83	82	65	61	74	64	..	81.7
	Minimum	43	48	54	56	61	61	63	63	67	65	66	69	70	67	68	68	68	64	64	59	45	39	42	42	52	52	52	50	42	43	..	56.8
Eastern Division																																	
Beattyville §§	Maximum	81	79	77	74	76	86	90	93	86	93	93	94	96	94	96	95	88	90	85	90	69	69	73	82	87	84	75	67	62	69	..	83.1
	Minimum	48	52	55	62	55	59	61	62	62	65	67	66	66	65	63	64	65	66	67	59	56	42	42	44	49	50	58	56	55	50	..	58.0
Berea	Maximum	79	79	76	76	73	82	85	86	79	90	60	89	90	89	88	87	90	88	85	86	72	68	71	78	78	78	75	65	70	68	..	80.3
	Minimum	51	53	56	58	59	63	68	69	68	65	64	66	67	69	67	66	68	68	67	56	52	40	40	51	56	62	58	55	58	58	..	59.9
Farmers	Maximum	80	80	74	76	75	84	86	90	90	92	94	93	90	91	93	91	91	91	83	85	73	72	76	81	84	82	70	65	73	63	..	82.3
	Minimum	45	47	57	60	62	58	62	60	61	63	66	68	65	64	62	61	62	64	66	56	55	40	37	41	44	46	44	45	47	47	..	55.2
Maysville §§	Maximum	83	84	73	73	78	84	89	93	93	92	94	96	96	95	94	94	93	92	87	85	67	74	79	84	88	84	56	64	73	65	..	83.4
	Minimum	45	48	53	58	62	58	59	63	64	62	63	65	66	65	65	64	64	64	65	57	52	39	41	45	46	51	53	51	44	44	..	55.9
Middlesboro	Maximum	83	81	79	74	74	82	85	87	84	89	89	91	89	88	89	89	86	86	85	86	75	68	71	77	81	81	85	86	78	71	..	82.3
	Minimum	53	55	60	64	65	60	62	62	62	69	68	66	66	64	63	60	67	66	66	60	59	40	44	49	50	50	58	63	66	63	..	60.0
Mount Sterling §§	Maximum	78	77	71	73	75	81	83	86	83	87	88	89	90	88	87	88	87	83	80	82	64	65	68	74	78	80	63	63	69	61	..	78.0
	Minimum	51	52	60	60	65	61	68	64	67	64	67	64	68	68	65	66	67	65	66	58	52	44	41	47	47	56	60	48	53	50	..	58.8
Richmond §§	Maximum	82	82	79	73	72	83	85	89	81	89	91	93	93	92	92	91	89	88	85	86	69	72	70	81	85	82	69	64	75	62	..	81.5
	Minimum	50	54	57	59	64	63	63	67	68	66	69	69	70	71	70	70	70	69	67	61	52	42	45	54	53	63	64	55	53	52	..	61.0
Weeksbury	Maximum	79	77	75	75	83	83	89	90	89	90	89	88	87	90	91	89	88	87	87	83	75	67	72	78	86	80	70	67	73	68	..	81.5
	Minimum	50	42	49	54	56	50	52	52	52	60	57	56	55	55	56	56	55	56	56	48	50	24	32	45	47	52	50	58	57	58	..	51.7
Williamsburg §§	Maximum	82	82	83	80	79	85	87	90	82	90	90	91	92	89	90	91	87	89	86	87	78	68	75	77	81	84	84	87	82	71	..	84.0
	Minimum	52	55	57	60	60	59	60	61	62	62	66	63	65	68	64	64	67	65	63	59	57	41	44	48	50	50	60	66	59	57	..	58.8

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
No Rain
No Rain

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

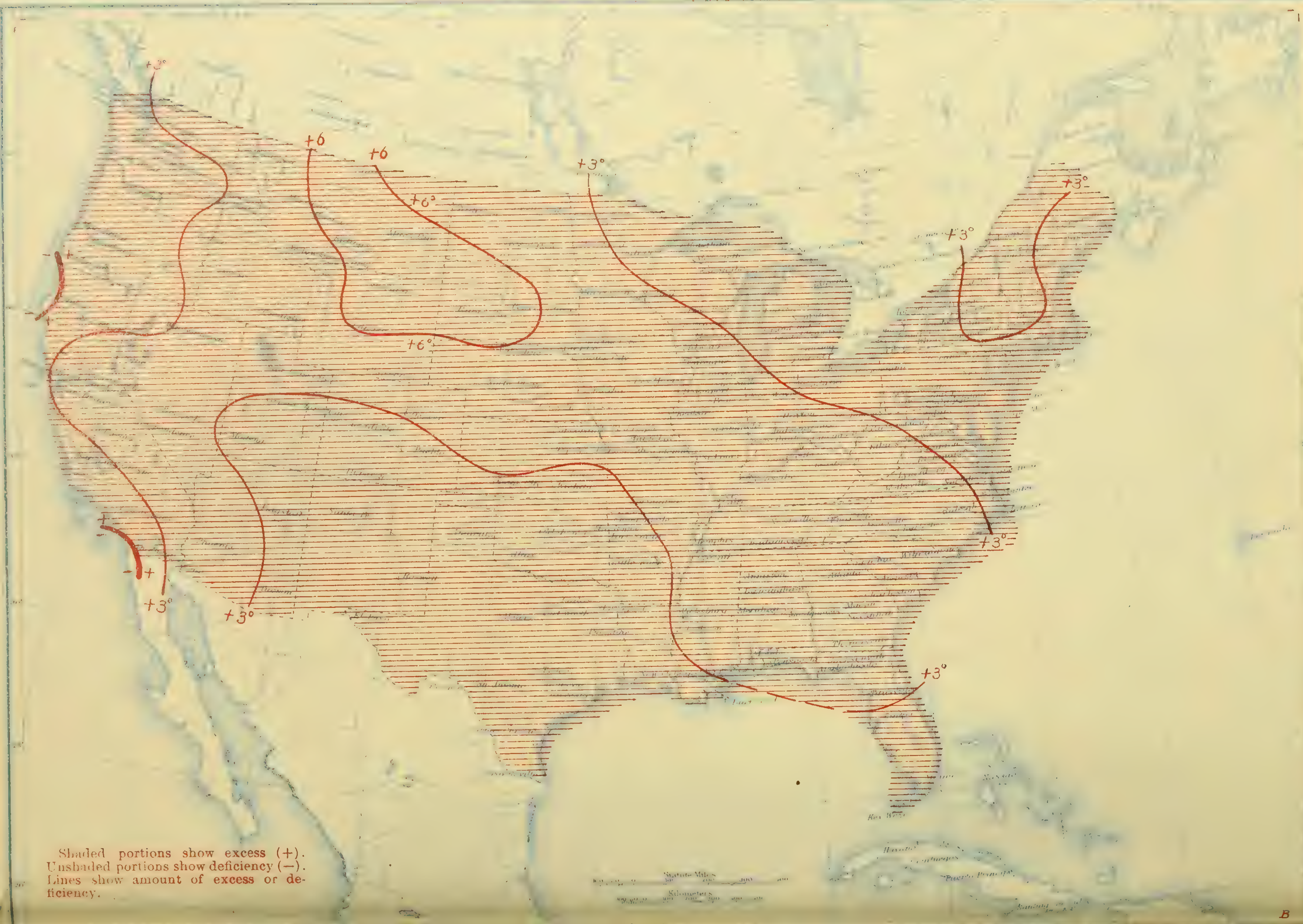
KENTUCKY SECTION

OCTOBER, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 20, 1915

Departure of the Mean Temperature from the Normal, October, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XX. LOUISVILLE, KY., OCTOBER, 1915. No. 10

GENERAL SUMMARY.

Exceptionally favorable weather for harvesting late crops and or all outdoor work prevailed during most of the month, and specially during the last two decades when maximum temperatures were generally high and mean temperatures continuously bove normal. The period 5-10th was abnormally cool, minimum temperatures on the 10th ranging between 27° and 37° at he various stations. Heavy frosts occurred in all parts of the State on the 9th and 10th, being most severe on the latter date nd sufficient to end the growing season in many localities, hough not generally killing.

The rainfall averaged considerably above normal for October, ut more than half of the total monthly amount at many stations occurred on the 1st. Except for a few heavy local showers n the 14th, 18th and 19th, the rainfall after the 1st was generlly light and scattered. During the last decade practically no ain occurred, and ideal autumn weather prevailed. Maximum emperatures in the 80's were registered at nearly all stations on everal days during that period, but on account of the clear kies and consequent rapid radiation the nights were quite cool nd the daily range in temperature large.

At the end of the month fall grain and pastures were in excellent condition, and farm work was well advanced.

PRESSURE.

The high areas that lay over the southern and southeastern States, during the last two decades furnished the principal ressure feature of the month, and together with the relatively ry depressions that moved eastward along the north border of he country, occasioned the fine autumn weather of that period ver this section.

The mean sea-level pressure for the State, based on the records f two stations, was 30.13 inches. The highest was 30.51 nches on the 10th and the lowest 29.63 inches on the 1st, both t Lexington.

TEMPERATURE.

The mean temperature for the State, based on the records of 36 stations, was 60.6°, which is 2.9° above normal for October. There were only four Octobers during the past 27 years with igher mean temperature, viz., in 1897, 1899, 1900 and 1910. However, the extremes in temperature were not unusual for this nonth, being 90° at Beattyville on the 15th, and 27° at Eubank, Berea and Greensburg on the 10th, and at Farmers on the 11th.

PRECIPITATION.

The average precipitation for the State, as determined from he records of 46 stations, was 3.40 inches, which is 1.12 inches n excess of the normal amount for October. Amounts at the various stations ranged between 7.80 inches at Berea and 0.81 inches at Lexington. The distribution of precipitation over the State as a whole was also irregular. Over the extreme western and the extreme southeastern counties, and those bordering on the Ohio River, the monthly amounts ranged generally between 1.5 and 3.0 inches. Over the central counties they were generally between 3 and 6 inches, while in a few localities in Warren, Madison and Pulaski Counties there were between 6 and 8 inches. The rains were rather local in character, and occurred mostly on the 1st, 4-5th, 13-14th and 18-19th.

WIND.

The total wind movement at Louisville was 7479 miles and at Lexington 8415 miles, the average hourly velocity being 10.1 and 11.3 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 35 miles per hour from the south on the 13th, and at Lexington 32 miles per hour from the southwest on the 4th.

HUMIDITY.

At Louisville the relative humidity at 7 a. m. was 80 per cent. and at 7 p. m. 63 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 74 and at Lexington 67.

MISCELLANEOUS.

Thunderstorms occurred generally in the central counties on the 4th, 17th and 18th. A barn was struck by lightning and burned near Meadow Lawn, Jefferson County, on the 18th.

A moderate rise occurred in the Ohio River during the first week, but after the 7th stages declined almost continuously and at the end of the month they were low in the Ohio, and also in the other streams of the State.

ERRATA.—Lexington: September, 1915, Total wind movement should be 8348 miles.

Comparative Data for October

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	52.0	−5.7	89	23	2.42	+0.14	..
1890	55.7	−2.0	87	23	2.94	+0.66	.
1891	54.8	−2.9	92	21	0.78	−1.50	.
1892	57.3	0.4	97	19	0.51	−1.77	
1893	56.4	−1.3	90	19	4.00	+1.72	.
1894	58.6	+0.9	92	25	1.36	0.92	5
1895	52.2	−5.5	89	14	1.24	−1.04	4
1896	55.8	−1.9	90	25	1.71	−0.57	5
1897	63.2	+5.5	96	26	1.10	−1.18	4
1898	57.1	−0.6	93	21	4.19	+1.91	10
1899	61.3	+3.6	93	26	2.42	+0.14	5
1900	64.5	+6.8	94	29	2.29	+0.01	5
1901	58.1	+0.4	93	25	1.57	−0.71	4
1902	60.1	+2.4	91	25	2.34	+0.06	5
1903	57.7	0	96	19	2.22	−0.06	5
1904	57.2	−0.5	93	20	0.52	−1.76	2
1905	57.0	−0.7	90	25	4.95	+2.67	9
1906	56.9	−0.8	91	20	1.51	−0.77	7
1907	55.5	−2.2	93	20	2.97	+0.69	6
1908	57.1	−0.6	92	26	0.71	−1.57	3
1909	55.2	−2.5	94	18	2.11	−0.17	6
1910	61.4	+3.7	96	17	4.45	+2.17	6
1911	59.9	+2.2	94	27	3.71	1.43	16
1912	59.5	1.8	92	25	1.42	−0.86	4
1913	56.9	0.8	97	23	3.55	+1.27	9
1914	59.7	+2.0	91	22	5.10	2.82	9
1915	60.6	2.9	90	27	3.40	1.12	6

Climatological data for October, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	61.2	+ 3.7	84	3†	32	9†	41	1.96	−0.19	1.00	0	5	16	8	7	S	W. T. Austin.
Blandville	Ballard	445	33	61.8	+ 3.7	82	3	32	9	31	1.53	−1.20	0.86	0	3	19	7	5	SW	E. W. Hoir.
Calhoun	McLean	437	11	62.0	+ 2.4	85	3†	31	10	42	2.34	−0.88	1.18	0	7	18	11	2	SW	W. A. Taylor.
Earlington	Hopkins	420	24	61.4	+ 2.4	86	3†	28	10	48	3.59	+1.35	1.54	0	4	23	1	7	S	Brick Southworth.
Hopkinsville	Christian	524	18	64.2	+ 3.8	85	3†	31	9	37	1.95	−0.92	0.95	0	4	22	0	9	E	W. F. Randle.
Marion	Crittenden	571	17	63.6	+ 4.5	83	3	32	9	35	1.55	−0.70	0.88	0	3	17	10	4	SW	B. C. Paris.
Owensboro	Daviess	479	17	60.8	+ 1.8	83	3	35	10	34	2.22	−0.88	1.00	0	3	17	6	8	SW	Henry S. Berry.
Paducah	McCracken	341	26								2.90	+0.48	0.77	0	5					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	61.8	+ 2.3	81	17	31	10	41	3.00	+0.57	1.50	0	4	17	8	6	S	W. W. Hicks.
Anchorage	Jefferson	700	13	60.7	+ 4.2	83	4	30	10	37	2.31	−0.55	0.75	0	6	21	7	3	SW	C. E. Barret.
Bardstown	Nelson	637	17	61.0	+ 1.5	84	3	31	10	39	6.36	+3.96	2.22	0	7	20	3	8	S	Chas. M. Talbott.
Bowling Green	Warren	500	25	60.8	+ 1.9	87	15	28	10	44	7.28	+5.39	2.90	0	7	18	8	5	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								5.99	+3.69	3.00	0	4					K. W. Massey.
Cloverport	Breckenridge	375	1								2.35		0.98	0	4					W. A. Cockerill.
Edmonton	Metcalfe	600	23																	Miss Lee Ray.
Eubank	Pulaski	1177	20	59.0	+ 2.3	84	17	27	10†	47	5.37	+3.23	2.75	0	3	16^{b}	3^{b}	10^{b}	NE	Mrs. Katie Payne.
Frankfort	Franklin	560	23	60.6	+ 4.1	82	5	31	11	45	2.66	+0.71	1.53	0	7	15	8	8	S	Miss Amelia Wood
Franklin	Simpson	691	20	63.4	+ 4.1	88	17	31	9	36	1.94	−0.16	0.82	0	6	12	14	5	NW	J. E. Newman.
Greensburg	Green	581	22	^{b}60.8	+ 4.3	84	17	27	10	46	5.17	+2.85	3.05	0	9	8^{a}	15a	7a	N	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								4.48	+2.39	3.05	0	7					Miss Lulu Wood.
Irvington	Breckenridge	646	17	60.8	+ 6.3	84	21	34	10	33	1.81	−0.87	0.89	0	14	20	7	4	SW	W. J. Piggott.
Leitchfield	Grayson	635	19	60.1	+ 2.0	82	3	31	10	37	3.47	+1.04	1.42	0	5	17	10	4	SW	John E. Stone.
Lexington	Fayette	989	30	59.8	+ 3.3	79	3	34	9	28	0.81	−1.41	0.66	0	5	19	6	6	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	59.4	+ 0.8	81	17	29	10	44	3.55	+1.44	1.30	0	10	21	4	6		Loretto Academy.
LOUISVILLE	Jefferson	525	42	61.2	+ 2.8	82	4	36	10	32	1.19	−1.44	0.62	0	6	16	10	5	S	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	59.4		86	13	30	10	41	2.52		1.18	0	6	17	8	6	SW	Wm. I. Hunt.
St. John	Hardin	777	18	59.4	+ 1.8	82	3†	28	10	39	3.09	+0.60	1.25	0	6	22	0	9	N	Sisters of Loretto.
Scott	Kenton	900	17	59.5	+ 1.8	81	4	31	10	35	2.36	+0.11	1.02	0	7	16	9	6	S	E. B. Wilson.
Shelby City	Boyle	1087	20	61.0	+ 3.5	85	17	28	10	44	3.58	+1.59	2.25	0	6	18	10	3	S	H. F. Ewing.
Shelbyville	Shelby	825	25	59.4	+ 3.0	81	3	29	10	37	3.42	+1.29	1.49	0	6	20	3	8	SE	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	57.6	+ 1.8	79	4	28	10	45	2.28	−0.05	1.10	0	6	17	7	7	S	E. D. Bourne.
Williamstown	Grant	943	12	59.9	+ 2.9	83	3†	31	10	35	3.43	+0.57	1.45	0	6	21	3	7		Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	60.5	+ 4.0	90	15	31	10†	49	5.29	+2.47	2.85	0	4	15	10	6	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	60.8	+ 2.7	81	20	27	10	41	7.80	+4.73	2.65	0	4	25	2	4	NW	C. F. Rumold.
Catlettsburg	Boyd	534	26								4.73	+2.26	3.36	0	6					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25								2.01	−0.16	1.08	0	8	18	6	7		J. V. Oldham.
Farmers	Rowan	668	8	59.4		85	15	27	11	51	2.50		1.80	0	2	26	4	1		Lee Craycraft.
Hazard	Perry		1																	Kelly E. Watts.
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								4.60		2.10	0	5					C. R. Lee.
Louisa	Lawrence	584	10								4.61	+2.19	3.00	0	6					G. M. Guerin.
Manchester	Clay	1400	3								3.10		1.86	0	4					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	58.4	+ 1.4	85	3†	29	10	47	2.60	+0.33	1.52	0	8	20	8	3	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	59.0	+ 1.8	85	17	28	31	48	4.34	+2.04	2.44	0	7	21	7	3		B. H. Perkins.
Mount Sterling	Montgomery	930	24	58.2	+ 3.4	78	15	30	10	39	4.06	+1.66	3. .0	0	6	22	3	6	NW	H. Clay McKee.
Pikeville	Pike	634	8								3.22	+0.78	2.24	0	5					I. M. Williams.
Richmond	Madison	926	22	62.0	+ 4.1	84	15	31	10	38	4.43	+2.18	3.04	0	5	16	9	6		J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	61.6		85	17	30	10	47	2.40		1.20	0	5	21	5	5		O. A. Lund.
Williamsburg	Whitley	939	18	61.2	+ 1.3	85	17	31	11†	45	4.42	+1.87	1.85	0	7	15	8	8	W	N. C. Jones.
State averages and extremes				60.6		90	15	27	10†	51	3.40		3.36	0	6	18	7	6	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for October, 1915.

STATIONS		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G	.05	.03												.76				.12	1.00													[illegible]
Blandville	M	T.												.44	.23				.86														1.53
Calhoun	G	.11	.02			T								.08	1.18		T	.06	.87	.02													2.34
Earlington ‖	G	.85													1.54				.08	1.12													[illegible]
Hopkinsville	C				.05									T	.10				.95	.85													1.95
Marion	O													.38	.29				.88														1.55
Owensboro	O	1.00													.63				T.	.59													[illegible]
Paducah ‖	O	.77												.50	.34				.77	.52													[illegible]
Central Division.																																	
Alpha	C	.10			1.00				T						T		T		1.50	.40													3.00
Anchorage	O	.21			.75									.14	.19		.08		.64														2.01
Bardstown	S	2.06			.19	2.22									.27	.15			.63	.81													[illegible]
Bowling Green ‖	G	2.90			.25	.20									1.20	.10			.45	2.18													7.28
Burnside	C	3.00	T			1.30									T	T				1.58	.11												5.99
Cloverport	O	.98	T			T.						T.			.46				.37	.54													[illegible]
Edmonton	G																																
Eubank	C	2.75				1.27														1.35													[illegible]
Frankfort	K	1.53	T		.05	.22				T.					.08	.11			.32	.35													2.66
Franklin	G	.23			T.									.30	.49		.05		.82								.05						1.94
Greensburg	G	3.05	.05		.05									.09		.52		.01	T.	.64	.45						.31						5.17
High Bridge	K	3.05	.03			.11									.02				.18	1.08	.01												4.48
Irvington	O	T.			.38									.16	.38				.89														1.81
Leitchfield	G	.12			1.21									.37	.35				1.42	T.													3.47
Lexington ***	K	.02			.02				T.					T	T.		T.	.02	.60	.15													0.81
Loretto	S	.88	.03		.51		T.		.02						.61	.12	.02	.01	1.30	.05													3.55
Louisville***	O	.02			.28				T.					.11	.16			.01	.61														1.19
Do. (Cherokee Park)	O	1.18			.36				T.						.40	.08			.49	.01													2.52
St. John	S	1.25	.04			.60									.56				.04	.60													3.09
Scott	L	1.02			.62				T.					T	.19	.07			.39	.04							.03						2.36
Shelby City	K	2.25			.09	.21			T.						.10				.80	.13	T.												3.58
Shelbyville	S	1.49			T.	.82									.07	.21			.23	.60													3.42
Taylorsville	S	.40			.02	.47			T.					T.	.28	.01			1.10	T.													2.28
Williamstown	L	1.45				1.14										.40	.03		.06	.35													3.43
Eastern Division.																																	
Beattyville‖	K	2.85	T.			.24									T.	T				2.05	.15							T					5.29
Berea	K	2.51			2.65														1.80	.84													7.80
Catlettsburg *	B	3.36	.08			.20														.96	.07						.06						4.73
Falmouth‖	L	1.08	.01		.04	.12				T.					.12	.25			.05	.34													2.01
Farmers	L	1.80			T.														T.	.70													2.50
Hazard‖	K																																
Jackson	K																																
London	C	2.10	.20			1.70														.45	.15												4.60
Louisa	B	3.00				.43														.85	.06						.11	.16					4.61
Manchester‖	K		1.86			.28														.59	.37												3.10
Maysville‖	O	1.52	.03			.30									.03	.05			.03	.62	.02												2.60
Middlesboro	C	2.44			.92	.13								.15						.53							.12	.05					4.34
Mount Sterling	L	3.00	.02			.15										T.	T	T	.02	.81							.06						4.06
Pikeville	B	2.24	.10			.42	T.														.18	T.						.28					3.22
Richmond‖	K	3.04	T.			.51									T.			T.	.40	.46							.02						4.43
Weeksbury	B	1.20	T.		.20	.35														.15							.50						2.40
Williamsburg ‖	C	1.85	.05	T.		.68	.02								T		T			.95	.58							.29					4.42

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

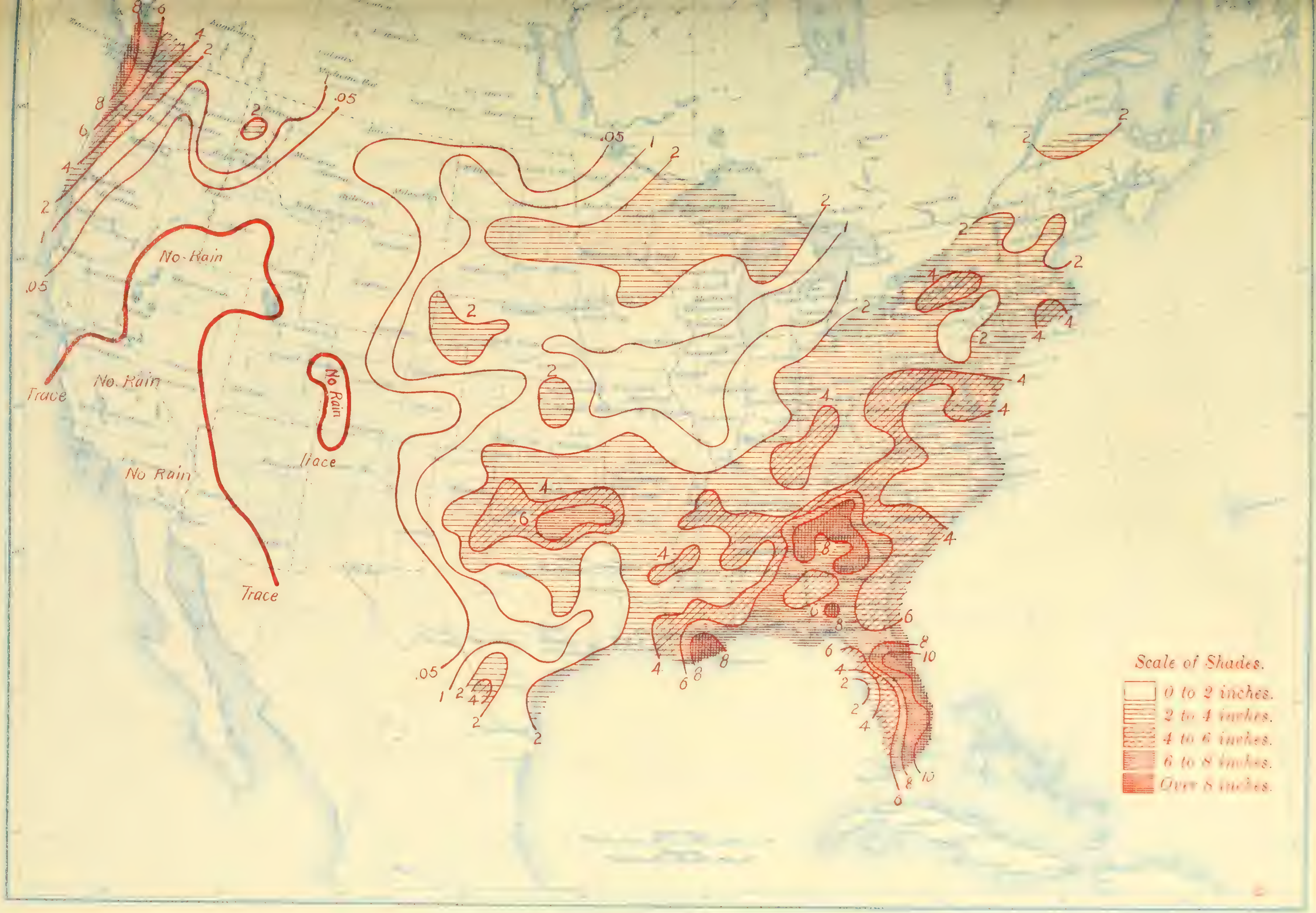
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for October, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	68	77	84	84	65	67	65	58	58	68	73	75	70	73	80	77	83	67	76	80	74	74	78	79	78	75	79	78	74	75	78	73.
	Minimum	57	54	57	67	48	38	39	33	32	32	42	45	59	61	61	63	60	65	61	52	58	43	39	41	46	46	39	42	47	39	42	48.6
Blandville	Maximum	71	76	82	76	61	63	61	57	54	66	69	75	76	71	77	77	79	70	75	78	70	72	72	76	78	74	77	80	73	77	79	72.3
	Minimum	55	55	61	61	45	40	45	39	32	37	48	52	52	62	57	60	63	63	63	57	50	48	47	46	51	51	46	50	53	52	51	51.4
Calhoun	Maximum	74	80	85	69	67	70	66	58	60	68	73	76	72	79	82	80	83	77	80	85	77	75	79	83	81	79	81	81	76	77	80	75.
	Minimum	55	52	56	56	43	37	40	35	34	31	47	47	62	61	58	59	59	63	52	54	52	47	40	42	47	48	39	41	48	42	43	48.1
Earlington §§	Maximum	71	81	86	86	67	72	67	58	60	73	76	80	73	77	83	78	86	66	80	84	76	78	81	86	82	82	84	84	76	80	81	77.
	Minimum	51	51	54	63	43	33	37	31	29	28	45	46	55	59	57	58	58	60	59	50	49	40	35	38	44	42	37	38	43	37	41	45.
Hopkinsville §§	Maximum	67	79	85	81	68	68	68	59	56	68	72	76	70	75	85	74	84	73	79	83	74	73	78	80	80	75	78	80	77	77	88	74.
	Minimum	56	52	65	67	48	38	51	36	31	32	44	50	62	62	62	64	64	64	62	62	63	43	62	65	67	48	41	67	50	42	41	53.
Marion	Maximum	76	78	83	78	63	67	63	67	67	68	70	76	70	76	77	75	81	76	77	81	73	72	76	79	79	76	79	78	74	76	78	74.
	Minimum	54	56	61	62	44	38	47	38	32	38	47	52	60	62	57	60	61	63	63	59	52	50	56	53	53	50	58	52	52	50	50	52.
Owensboro §§	Maximum	63	75	83	80	60	63	60	55	53	65	69	73	72	73	75	77	82	72	76	79	69	73	73	77	78	74	75	78	69	76	77	71.
	Minimum	52	54	53	65	46	43	42	36	40	35	44	49	54	62	58	59	59	62	61	56	53	49	42	45	48	52	42	45	51	44	43	49.
Central Division																																	
Alpha	Maximum	64	68	76	74	73	60	65	55	47	62	68	70	73	75	75	75	81	80	73	70	79	72	73	78	76	72	77	74	78	73	75	71.
	Minimum	62	59	56	73	54	46	45	39	39	31	48	45	65	62	62	62	61	70	62	54	51	49	44	44	59	60	43	43	60	42	34	52.
Anchorage	Maximum	61	67	82	83	66	67	65	55	55	66	73	74	77	73	78	66	79	71	73	79	72	73	76	77	78	73	72	78	70	70	76	71.
	Minimum	56	56	64	64	45	34	44	33	34	30	46	47	56	63	63	55	58	62	58	55	55	51	39	51	47	48	45	53	45	40	40	49.
Bardstown §§	Maximum	67	75	84	81	68	70	68	60	58	68	76	77	77	71	81	80	82	67	78	81	77	76	79	80	80	75	78	80	76	72	77	74.
	Minimum	51	51	53	61	49	41	40	34	36	31	37	47	51	62	42	62	55	60	62	54	51	46	40	43	48	50	40	44	47	40	38	47.
Bowling Green §§	Maximum	77	79	83	85	68	72	69	62	59	70	74	75	73	71	87	76	86	68	78	81	76	75	80	81	80	81	80	79	75	78	78	76.
	Minimum	55	53	52	49	45	38	38	34	30	28	38	42	49	54	60	58	56	61	60	51	50	43	41	41	44	40	40	39	49	39	34	45.
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Eubank §§	Maximum	65	73	81	70	66	57	67	58	51	65	73	75	76	77	83	..	84	78	72	80	79	73	..	82	84	75	79	81	78	73	78	^{b}73.
	Minimum	56	55	50	51	50	42	37	30	29	27	27	33	45	56	60	62	..	59	60	53	47	48	39	..	41	44	40	38	38	37	31	^{b}44.
Frankfort	Maximum	73	70	77	81	82	79	65	70	68	56	66	74	77	78	80	78	80	78	79	76	76	78	73	73	73	77	78	71	77	71	77	74.
	Minimum	50	59	50	52	61	49	40	40	35	35	31	36	40	53	60	63	59	52	63	61	52	49	43	39	42	42	46	28	38	37	32	46
Franklin	Maximum	66	77	85	80	69	69	70	64	56	67	73	75	73	71	79	70	88	80	75	82	75	72	76	82	82	75	81	82	78	71	77	74.
	Minimum	58	55	60	67	49	42	43	38	31	33	46	51	61	62	65	61	58	64	62	58	54	48	46	46	57	57	47	48	55	47	45	52.
Greensburg §§	Maximum	64	75	82	76	72	74	75	..	63	74	75	77	..	73	82	74	84	74	70	78	75	72	75	78	80	69	77	79	75	70	77	^{b}74.
	Minimum	56	54	51	58	50	40	40	33	32	27	35	49	63	..	64	63	55	61	62	55	49	49	38	39	42	50	37	37	45	35	31	^{a}46.
Irvington	Maximum	68	73	81	82	67	62	62	52	53	63	69	71	73	75	76	72	79	73	78	77	84	72	72	73	75	72	72	74	69	65	74	71.
	Minimum	56	52	53	67	47	41	41	37	37	34	47	55	62	53	63	62	58	63	62	54	51	46	42	45	55	50	42	45	50	47	46	50
Leitchfield	Maximum	66	74	82	81	65	63	63	57	52	63	69	73	75	70	75	71	81	75	73	76	71	71	73	77	78	74	76	78	71	69	76	71
	Minimum	58	52	56	64	46	40	39	35	33	31	42	47	60	61	63	62	56	63	60	52	53	46	41	43	49	48	40	41	47	41	40	48
Lexington	Maximum	62	71	79	75	61	64	63	52	49	62	69	70	75	73	76	65	77	69	70	74	69	67	70	73	75	68	68	73	67	62	72	68
	Minimum	56	52	59	57	45	42	43	35	34	34	46	52	59	63	61	58	56	62	61	56	52	47	51	49	54	54	53	54	54	46	46	51
Loretto	Maximum	65	72	80	78	71	66	65	56	52	63	71	73	76	70	79	71	81	74	71	77	72	71	74	76	78	71	74	77	68	72	76	71
	Minimum	60	50	55	66	48	38	38	34	35	29	39	45	55	60	63	62	53	63	61	52	50	44	38	40	44	51	36	39	35	52	32	47
Louisville	Maximum	67	72	81	82	62	64	63	54	54	62	70	71	74	72	75	68	77	70	76	78	70	70	73	75	77	73	72	77	70	68	75	70
	Minimum	58	52	60	55	46	42	45	39	41	36	49	51	60	63	61	60	57	62	61	56	53	48	49	48	52	58	48	50	54	50	43	51
Do. (Cherokee Park)	Maximum	66	71	79	82	71	62	63	57	52	61	69	71	86	73	74	70	76	73	72	77	73	68	70	73	76	72	70	76	71	65	75	70
	Minimum	57	47	55	63	47	37	44	36	39	30	43	45	58	61	59	59	54	63	58	54	51	45	40	44	44	50	39	40	46	43	34	47
St. John §§	Maximum	66	72	82	82	64	66	68	59	55	62	70	73	75	68	79	69	81	74	78	80	71	70	75	77	78	77	77	74	73	67	75	72
	Minimum	58	56	54	58	45	39	38	33	30	28	37	42	51	58	62	61	56	57	58	53	52	44	39	41	44	46	38	59	46	41	37	46
Scott	Maximum	62	74	80	81	70	65	65	55	54	60	71	71	75	70	68	71	77	70	74	77	68	67	75	66	77	72	71	77	68	68	73	7
	Minimum	57	47	56	70	49	37	42	35	37	31	62	47	57	62	60	55	48	61	57	52	50	43	40	42	45	50	40	42	47	45	49	48
Shelby City	Maximum	65	74	83	74	69	71	69	57	56	67	75	76	76	77	83	74	85	73	75	80	75	74	77	78	79	71	74	80	72	70	78	73
	Minimum	59	53	55	63	47	39	39	34	33	28	39	43	52	61	61	61	64	64	61	55	55	43	28	42	43	56	40	42	49	45	34	48
Shelbyville §§	Maximum	66	70	81	79	63	66	62	56	58	66	74	74	76	74	80	66	78	67	75	80	75	73	78	79	79	74	74	79	73	70	76	72
	Minimum	47	48	58	62	48	36	44	33	36	29	39	45	52	59	62	59	53	56	61	54	49	42	39	41	46	47	38	42	42	35	37	46
Taylorsville	Maximum	67	69	78	79	61	63	65	53	52	62	68	71	76	73	76	71	71	67	72	75	70	67	71	71	76	72	70	74	69	68	74	69
	Minimum	60	50	50	65	47	38	37	32	38	28	34	38	51	61	63	61	65	63	61	52	48	43	37	40	40	44	35	35	40	33	29	45
Williamstown §§	Maximum	65	79	83	83	64	71	70	55	58	64	75	75	79	73	74	76	79	68	76	80	70	73	78	76	79	74	74	78	71	72	71	73
	Minimum	43	46	53	63	46	38	41	35	33	31	43	47	48	58	61	54	52	57	57	52	52	42	43	41	46	51	44	49	46	38	40	46
Eastern Division																																	
Beattyville §§	Maximum	69	79	85	85	69	66	75	61	54	74	79	72	80	83	90	70	87	81	70	81	83	73	79	81	82	73	76	82	77	71	80	76
	Minimum	54	55	52	53	53	44	42	37	32	31	33	35	40	48	53	59	57	54	59	57	50	45	38	39	41	42	40	36	39	24	31	44
Berea	Maximum	66	80	80	72	71	72	72	58	54	51	77	71	69	79	71	73	75	76	66	81	71	71	70	77	75	71	71	72	71	65	76	71
	Minimum	54	51	58	63	50	43	40	33	33	27	45	41	58	61	51	63	58	66	60	56	51	46	56	51	67	65	48	42	51	28	35	5
Farmers	Maximum	70	77	83	81	69	65	72	62	55	75	61	75	79	81	85	73	80	74	70	80	83	73	75	72	83	75	76	74	72	69	79	74
	Minimum	40	56	47	66	59	40	40	31	32	31	27	50	48	58	57	61	52	54	60	53	45	40	34	35	36	50	34	40	52	31	28	44
Maysville §§	Maximum	68	79	85	85	65	70	70	59	55	66	77	76	82	74	82	77	82	73	76	81	70	72	75	68	80	74	74	80	72	72	78	74
	Minimum	49	53	50	56	49	40	40	33	34	29	34	35	38	51	60	59	49	52	52	53	48	40	38	39	38	38	36	33	34	35	32	42
Middlesboro	Maximum	69	76	80	74	68	72	70	59	53	64	73	79	66	74	72	70	85	80	78	78	80	72	77	78	77	78	77	78	76	73	74	7
	Minimum	59	57	55	55	56	51	49	37	39	32	32	31	38	36	40	38	59	54	64	49	54	47	37	37	40	46	49	36	38	24	28	44
Mount Sterling §§	Maximum	66	75	77	76	68	63	65	64	56	58	65	71	72	75	78	72	75	72	70	75	70	68	69	69	76	68	68	74	68	62	73	6
	Minimum	53	54	55	62	46	43	41	37	34	30	35	41	44	51	55	62	54	62	60	54	55	44	39	42	44	54	40	38	47	38	34	4
Richmond §§	Maximum	65	75	82	77	66	69	69	56	53	66	75	76	77	80	84	69	82	73	72	79	78	75	76	77	79	69	75	78	75	70	77	7
	Minimum	55	54	56	62	49	42	45	38	33	31	50	45	59	63	63	63	57	62	61	54	52	45	43	48	51	57	46	47	53	44	39	5
Weeksbury	Maximum	69	75	83	83	75	69	70	58	60	77	65	79	79	79	85	75	85	84	71	78	78	70	70	80	78	78	74	77	77	65	80	7
	Minimum	58	59	50	58	53	51	46	38	33	30	32	40	53	59	57	58	59	57	60	59	50	50	39	43	40	54	44	38	46	38	39	48
Williamsburg §§	Maximum	70	82	78	75	76	75	60	57	49	61	70	77	78	78	80	82	85	83	75	75	78	75	76	74	76	80	79	78	75	79	74	7
	Minimum	61	58	59	57	53	50	47	39	33	33	31	36	48	58	56	57	58	60	63	58	54	49	39	38	39	18	50	45	47	34	31	4

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc. days missing from record.


No Rain
No Rain
No Rain
No Rain
Trace
Trace
Trace
.05
1
2
4
6
8
10
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

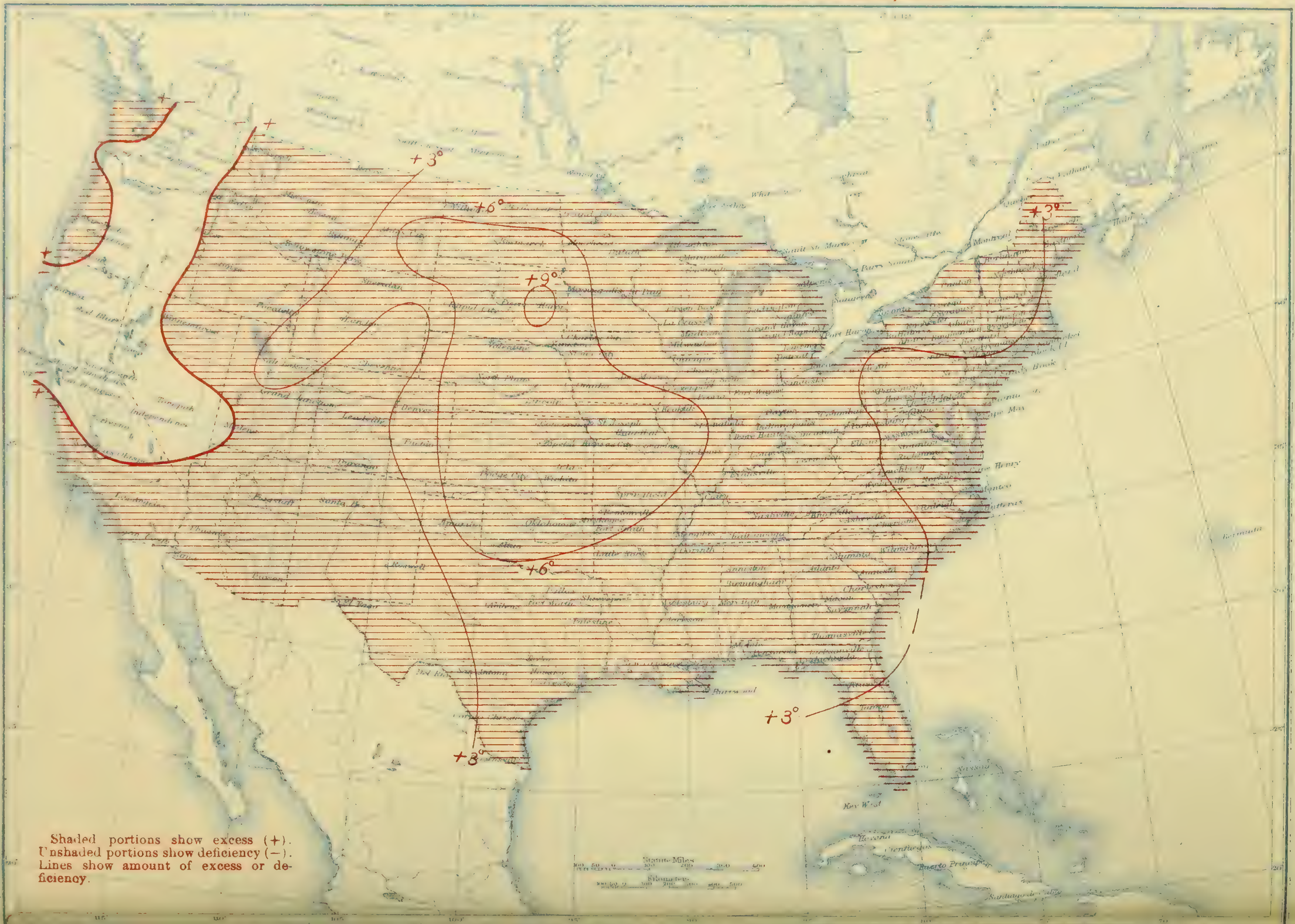
KENTUCKY SECTION

NOVEMBER, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 20, 1915

Departure of the Mean Temperature from the Normal, November, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XX. Louisville, Ky., November, 1915. No. 11

GENERAL SUMMARY.

Mild weather prevailing at the close of October continued luring the first 12 days of November, and killing frost did ot occur in the vicinity of Louisville until November 13th. The month as a whole was warm for November, maximum emperatures being generally unseasonably high and mean emperatures on most days considerably above normal. During he period 1st-12th, and also on the 25th and 26th, remarkably varm weather prevailed. On the 1st, 6th and 7th maximum emperatures of 80° and over were registered at many stations. few cold nights occurred during the latter part of the month, specially on the 22d and 30th, when minimum temperatures ver the State ranged generally between 16° and 25°.

Precipitation averaged considerably more than the normal November amount and was well distributed through the month, xcept that there was very little during the first week. Rainall was more or less general on the 8th, 12th, 14-15th, 18-19th nd 26th. Hail occurred in some localities on the 12th nd 26th. Thunderstorms were reported from the central ounties on the 5th, 8th, 11th, 12th and 26th. Snow lurries occurred on the 14th at a few places, on the 19th in the entral and western counties, and generally over the State in the orm of blinding snow squalls on the 29th.

Weather conditions during the month were favorable for outloor work, and also for the growth of fall grain which made xcellent progress.

PRESSURE.

Weather conditions over the State during the first half of the nonth were generally dominated by high pressure areas, but vell developed areas of low pressure accompanied by rains and nore or less high winds passed frequently over the section or to he northward during the last two weeks.

The mean sea-level pressure for the State, based on the records f two stations, was 30.07 inches. The highest was 30.47 nches at Louisville on the 3d, and the lowest 29.36 inches at Louisville on the 19th.

TEMPERATURE.

The mean temperature for the State, based on the records of 36 stations, was 49.8°, or 3.8° above normal for November. In only three Novembers during the past 27 years has the temperature averaged higher, viz., in 1902, 1909 and 1913. The xtremes for the month were 85° on the 1st at Bardstown and 16° on the 30th at several stations. This minimum was higher han usual for November.

PRECIPITATION.

The average precipitation for the State, as determined from he records of 47 stations, was 4.80 inches, which is 1.21 inches n excess of the normal amount for November. Over the lower watersheds of the Kentucky and Licking rivers monthly amounts ranged between 2.6 and 4.0 inches, and there were also less than 4.0 inches over the upper portions of the Kentucky and Big Sandy basins. Over the middle tier of counties from 4 to 6 inches occurred, while over the southern counties the monthly totals ranged between 6 and 8 inches. Amounts at the various stations ranged between 2.65 inches at Scott, Kenton County, and 8.03 inches at Alpha, Clinton County. Heavy rains were general on the 14th and 18th, the largest 24-hour rainfall being 3.45 inches at Alpha on the 14th.

WIND.

The total wind movement at Louisville was 10624 miles and at Lexington 12372 miles, the average hourly velocity being 14.8 and 17.2 miles, respectively. This wind movement is one of the largest on record. The maximum velocity for 5 minutes was at the rate of 52 miles per hour at Louisville and 50 miles per hour at Lexington, from the southwest on the 19th.

HUMIDITY.

At Louisville the relative humidity at 7 a. m. was 70 per cent, and at 7 p. m. 66 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 62 and at Lexington 60.

MISCELLANEOUS.

The stage of water in the Ohio River was comparatively low during the first half of the month. A sharp rise set in in the upper reaches on the 15th and in the middle and lower courses on the 16th, continuing until the 20th. During the last decade there was a steady decline, but good boating stages still obtained at the end of the month.

ERRATA.—October: Highest pressure for the state should be 30.48 inches at Louisville on the 9th.

Comparative Data for November

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 or more.
1889	43.1	−2.9	85	10	6.04	+2.45	..
1890	48.6	+2.6	81	19	4.87	+1.28	..
1891	43.5	−2.5	75	10	6.04	+2.45	
1892	42.8	−3.2	78	9	3.85	+0.26	
1893	44.3	−1.7	79	−2	3.12	−0.47	
1894	43.3	−2.7	80	8	1.32	−2.27	4
1895	45.8	−0.2	85	16	4.29	+0.70	7
1896	49.3	+3.3	80	11	5.01	+1.42	8
1897	47.8	+1.8	78	12	4.69	+1.10	10
1898	43.2	−2.8	80	10	2.79	−0.80	8
1899	49.8	+3.8	79	20	2.12	−1.47	8
1900	47.0	+1.0	83	15	7.78	+4.19	8
1901	44.8	−1.2	82	11	1.52	−2.07	4
1902	53.4	+7.4	90	20	4.42	+0.83	11
1903	42.5	−3.5	81	5	3.01	−0.58	8
1904	44.7	−1.3	79	14	0.89	−2.70	3
1905	46.4	+0.4	79	14	3.55	0.04	7
1906	46.1	+0.1	83	11	5.02	+1.43	7
1907	44.2	−1.8	75	15	3.49	−0.10	7
1908	48.6	+2.6	80	8	2.61	−0.98	7
1909	54.7	+8.7	86	19	2.29	−1.30	6
1910	41.1	−4.9	78	11	2.04	−1.55	6
1911	41.6	−4.4	85	9	4.51	+0.92	8
1912	45.2	−0.8	82	10	1.22	−2.37	4
1913	50.5	+4.5	81	8	3.25	−0.34	9
1914	46.9	+0.9	83	5	1.23	−2.36	[illegible]
1915	49.8	+3.8	85	16	4.80	+1.21	9

Climatological data for November, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	50.4	+ 5.3	80	1†	22	30	36	5.18	+2.06	1.70	0	7	17	4	9	sw	W. T. Austin.
Blandville	Ballard	445	33	52.4	+ 5.8	81	1†	24	15†	37	5.55	+1.09	1.77	0	6	14	8	8	sw	E. W. Horr.
Calhoun	McLean	437	11	52.2	+ 4.8	83	1†	20	30	38	5.49	+2.29	1.42	T.	8	8	16	6	sw	W. A. Taylor.
Earlington	Hopkins	420	24	50.7	+ 3.0	85	6	20	30	42	4.95	+0.57	1.22	T.	9	16	4	10	s	Brick Southworth.
Hopkinsville	Christian	524	18	52.4	+ 4.1	82	6	22	30	34	6.79	+2.64	1.45	0	9	19	0	11	E	W. F. Randle.
Marion	Crittenden	571	17	^{e}53.4	+ 5.1	80^{e}	6	23^{e}	15	34^{e}	4.02	−0.07	1.52	T.	7	10^{e}	9^{e}	6^{e}	sw	B. C. Paris.
Owensboro	Daviess	479	17	50.2	+ 2.7	80	6	21	30	34	4.77	+1.32	1.44	T.	8	16	5	9	NW	Henry S. Berry.
Paducah	McCracken	341	26								6.07	+1.73	1.48	......	9					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	54.0	+ 4.5	79	8	24	30	42	8.03	+4.30	3.45	T.	7	18	6	6	w	W. W. Hicks.
Anchorage	Jefferson	700	13	48.3	+ 3.8	79	7	19	22†	34	4.52	+1.55	1.10	0.2	12	18	3	9	sw	C. E. Barret.
Bardstown	Nelson	637	17	49.8	+ 3.2	85	1	19	30	41	4.69	+1.31	1.33	......	8	15	9	6	s	Chas. M. Talbott.
Bowling Green	Warren	500	25	49.7	+ 2.8	81	6†	21	16†	45	6.27	+2.21	1.80	......	8	18	3	9	s	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								6.30	+2.63	2.75	T.	9					C. L. Hurt.
Cloverport	Breckenridge	375	1								5.46	......	1.81	T.	9					W. A. Cockerill.
Edmonton	Metcalfe	600	23	50.8	+ 4.0	79	1†	19	30	35	6.12	+2.22	1.68	T.	9	14	9	7	s	Miss Lee Ray.
Eubank	Pulaski	1177	20	^{c}47.8	+ 3.3	81^{c}	7	16^{c}	30	51^{f}	5.70	+2.67	1.85	......	9	13	4	13	sw	Mrs. Katie Payne.
Frankfort	Franklin	560	23	51.3	+ 5.1	80	1	20	30	37	3.84	+0.43	1.12	T.	10	11	10	9	s	Mrs. Amelia Wood
Franklin	Simpson	691	20	52.3	+ 3.8	81	1†	22	30	32	6.64	+3.11	2.20	T.	7	3	20	7	sw	J. E. Newman.
Greensburg	Green	581	22	48.6	+ 3.9	81	6†	20	30	41	5.80	+2.12	1.54	T.	9	6	12	12	sw	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								3.93	+0.95	1.72	0.5	9					Miss Lulu Wood.
Irvington	Breckenridge	646	17	50.0	+ 3.9	77	1†	20	30	31	5.45	+2.05	1.78	T.	7	17	3	10	sw	W. J. Piggott.
Leitchfield	Grayson	635	19	49.6	+ 3.3	80	6	18	30	35	5.12	+1.19	1.80	T.	7	18	6	6	sw	John E. Stone.
Lexington	Fayette	989	30	48.8	+ 4.1	76	7	17	30	33	3.90	+0.42	1.53	0.2	12	15	8	7	sw	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	49.6	+ 3.4	79	6	17	30	89	4.88	+1.76	1.67	T.	8	16	5	9	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	49.6	+ 3.3	78	6	21	30	30	3.88	−0.30	1.54	T.	8	12	8	10	sw	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	49.8	......	77	1†	19	30	36	4.08	......	1.43	0.5	8	16	7	7	sw	Wm. I. Hunt.
St. John	Hardin	777	18	49.0	+ 3.6	80	6	19	30	37	3.02	−0.46	0.97	......	6	19	5	6	s	Sisters of Loretto.
Scott	Kenton	900	17	48.1	+ 3.8	77	7	18	30	31	2.65	−0.21	0.79	0.9	11	9	14	7	s	E. B. Wilson.
Shelby City	Boyle	1087	20	50.0	+ 7.4	81	7	16	30	37	4.58	+1.44	1.20	......	10	19	5	6	sw	H. F. Ewing.
Shelbyville	Shelby	825	25	47.0	+ 3.1	80	6	16	30	39	4.35	+0.40	1.22	0.2	9	16	8	6	w	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	48.2	+ 3.7	77	1†	18	30	38	4.34	+0.98	1.12	0.3	11	15	6	9	s	E. D. Bourne.
Williamstown	Grant	943	12	47.2	+ 2.4	84	10	16	30	47	2.84	+0.48	1.21	0.5	9	18	3	9	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	47.7	+ 4.0	84	7	21	22†	50	4.92	+1.95	1.90	1.0	11	14	8	8	w	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	50.0	+ 2.8	79	7	19	30	38	5.02	+2.12	1.25	0.8	10	21	1	8	sw	C. F. Rumold.
Catlettsburg	Boyd	534	26								4.62	+2.17	1.64	T.	9					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25								3.23	−0.39	1.07	T.	8	13	10	7	w	J. V. Oldham.
Farmers	Rowan	668	8								3.55	+0.82	1.00	2.0	6					Mrs. Lurlene Triplett.
Hazard	Perry		1																	
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								5.44	......	1.40	T.	9					C. R. Lee.
Louisa	Lawrence	584	10								4.22	+0.92	1.78	T.	7					G. M. Guerin.
Manchester	Clay	1400	3								3.44	......	0.96	......	7					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	47.2	+ 2.9	82	7	20	30	50	4.05	+1.07	1.18	0.8	11	14	10	6	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	^{h}47.8	+ 2.0	78^{h}	12	23^{h}	22	39^{h}	5.63	+2.12	1.50	......	7	14^{h}	3^{h}	5^{h}	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	46.7	+ 2.4	78	1	18	30	36	4.43	+0.98	1.45	0.5	10	15	8	7	NW	H. Clay McKee.
Pikeville	Pike	634	8								3.12	+0.25	1.42	2.0	7					I. M. Williams.
Richmond	Madison	926	22	50.4	+ 3.6	80	7	19	30	34	4.62	+1.93	1.33	0.2	11	16	2	12	......	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	1	50.4	......	80	1†	22	30	48	3.55	......	1.70	3.0	6	21	4	5	......	O. A. Lund.
Williamsburg	Whitley	939	18	50.6	+ 3.6	81	8	22	22	42	6.14	+3.21	1.80	0.2	8	13	7	10	w	N. C. Jones.
State averages and extremes				49.8	......	85	1	16	30	51	4.80	......	3.45	0.4	9	15	7	8	sw	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for November, 1915.

Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
Western Division.																															
eaver Dam ‖ . . . G								.53				.83			1.22				1.70	.16						[illegible]			.22		[illegible]
landville . . . M								.69			.52			1.02	.03			1.77								[illegible]					[illegible]
alhoun . . . G								.81			T.	1.30		1.02	.20			1.42	.22							[illegible]		.10	T		[illegible]
arlington . . . G									.70			1.11		.84	.27			.19	1.22							.40	[illegible]		[illegible]		[illegible]
opkinsville . . . C								1.05	.05			1.35		1.45	.30			1.40	.12							1.00		[illegible]			[illegible]
arion . . . O								.78			.45	.15		.72	.18			1.52	.22												[illegible]
wensboro . . . O									.55			1.44		.65	.17			1.38	.13								.55		.10		[illegible]
aducah . . . O								.40	1.20			.51		.74	.15			1.48	.81	T.						.73			.05		[illegible]
Central Division.																															
lpha . . . C								1.25			.75	.35		3.45				1.58	T.							.45		.20	T	T.	[illegible]
nchorage . . . O								.28		T	.37	.56		.99	.25			1.10	.45	.03						[illegible]	.14	.10	.02		[illegible]
ardstown ‖ . . . S									.32			.81		.45	1.05				1.33	.12							.50		.11		[illegible]
owling Green ‖ . . . G									1.10			1.00		1.00	1.10			[illegible]	*	1.80						.27					[illegible]
urnside ‖ . . . C									.46			.67	.30	.40	2.75				1.20	.08							.21		.20		[illegible]
loverport ‖ . . . O								T.	.62			1.32		.53	.55			T.	1.81	.10						.21	.20		.12	T.	5.46
dmonton . . . G								.57	.12			.70		1.68	.61			1.03	.80							.50		.11	T		[illegible]
ubank ‖ . . . C									.45			.85	.25	.32	1.85				1.45	.06							.33		.11		5.70
rankfort . . . K						.02			.12			.81		.58	.93				1.12	.03							.13		.05	.02	[illegible]
ranklin . . . G								.77			T.	.75		2.20	.50			1.75	T.							.61		.03			[illegible]
reensburg ‖ . . . G									.74			.83		.71	1.24				1.54	.12						.20	.35		.07		[illegible]
igh Bridge ‖ . . . K									.15			.55		.57	1.15				1.24	.02							.13		.07	.05	[illegible]
vington . . . O								.52				1.35		1.08				1.78	.32							.22		.18	T		5.45
eitchfield . . . G								.33			1.00			1.46				1.70	.18							.33		.12	T		[illegible]
exington *** . . . K	T.					.02		.14			.10	.60		1.52	.02			1.24	.07				T.			.07	.01	.09	.02		[illegible]
oretto . . . S								.48				.98	T.	1.67		T.		1.37	.02	.02						.28		.06	T		[illegible]
ouisville*** . . . O								.25			.61	.21		.86				1.25	.31							.32		.07	T		[illegible]
Do (Cherokee Park) . . . O								.40				.85			.95				1.43	.02						.28		.09	.01		[illegible]
t. John ‖ . . . S									.77			.97			.91					.12						.11	.14				3.02
cott . . . L								.10			T.	.45		.32	.19			.52	.79	T.			.05			.03	.16	.06	.04	T	[illegible]
helby City . . . K								.24	.04			.75		1.20	.72			.28	1.17							.05	.10		.03		4.58
helbyville ‖ . . . S									.42			1.21		.30	.90				1.22	.03							.20		.05	.02	[illegible]
aylorsville . . . S								.28				.97		1.12	.35			.52	.63	T.						.28	.04	.06	.07	.02	4.34
illiamstown ‖ . . . L									.15			.36		.27	.72				1.21	.02				T.			.03		.03	.05	2.84
Eastern Division.																															
eattyville . . . K						.10			.17			.40	.29	.30	1.90				.83	.08	T						.60		.15	.10	[illegible]
erea . . . K								.21				.77		1.25	.88			.60	.52							.10	.20	.40	T.	.09	[illegible]
atlettsburg ‖ . . . B									T.			.46	.40	.32	1.64	T.			.88	.16							.62		.10	.04	[illegible]
almouth ‖ . . . L									.37			.42		.40	.77				1.07	.04							.10		T.	.06	3.23
armers . . . L										.15				.48	1.00				1.00								.71			.21	[illegible]
azard . . . K																															
ackson . . . K																															
ondon ‖ . . . C									.22			.70	.10	.70	1.40				.92	.08							.70		.62	T.	[illegible]
ouisa ‖ . . . B												.43	.25	.32	1.78				.70				T				.64		.10	T.	4.22
anchester ‖ . . . K												.78	.37	.83	.96					.21							.17		.12		[illegible]
aysville . . . O									.26			.40	.04	.35	1.18	.03			.96	.08							.55		.15	.05	4.05
iddlesboro . . . C												.85	1.50	1.10					1.07							.13	.80		.18		5.63
ount Sterling . . . L									.20			.55	.15	.35	1.45				1.04	.11							.40	.12		.06	[illegible]
ikeville ‖ . . . B									T.			.36	.16	.62	1.42	T			.22	.12							T		T.	.22	3.12
ichmond ‖ . . . K						.09			.26			.67	.13	.55	1.33			1.00	.20								.20		.15	.04	4.62
eeksbury . . . B								T.						1.70	.80			.10	.40										.25	.30	3.55
illiamsburg ‖ . . . C												.45	.65	.80	1.80				.81	.40							.93		.30	T	6.14

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time bservation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

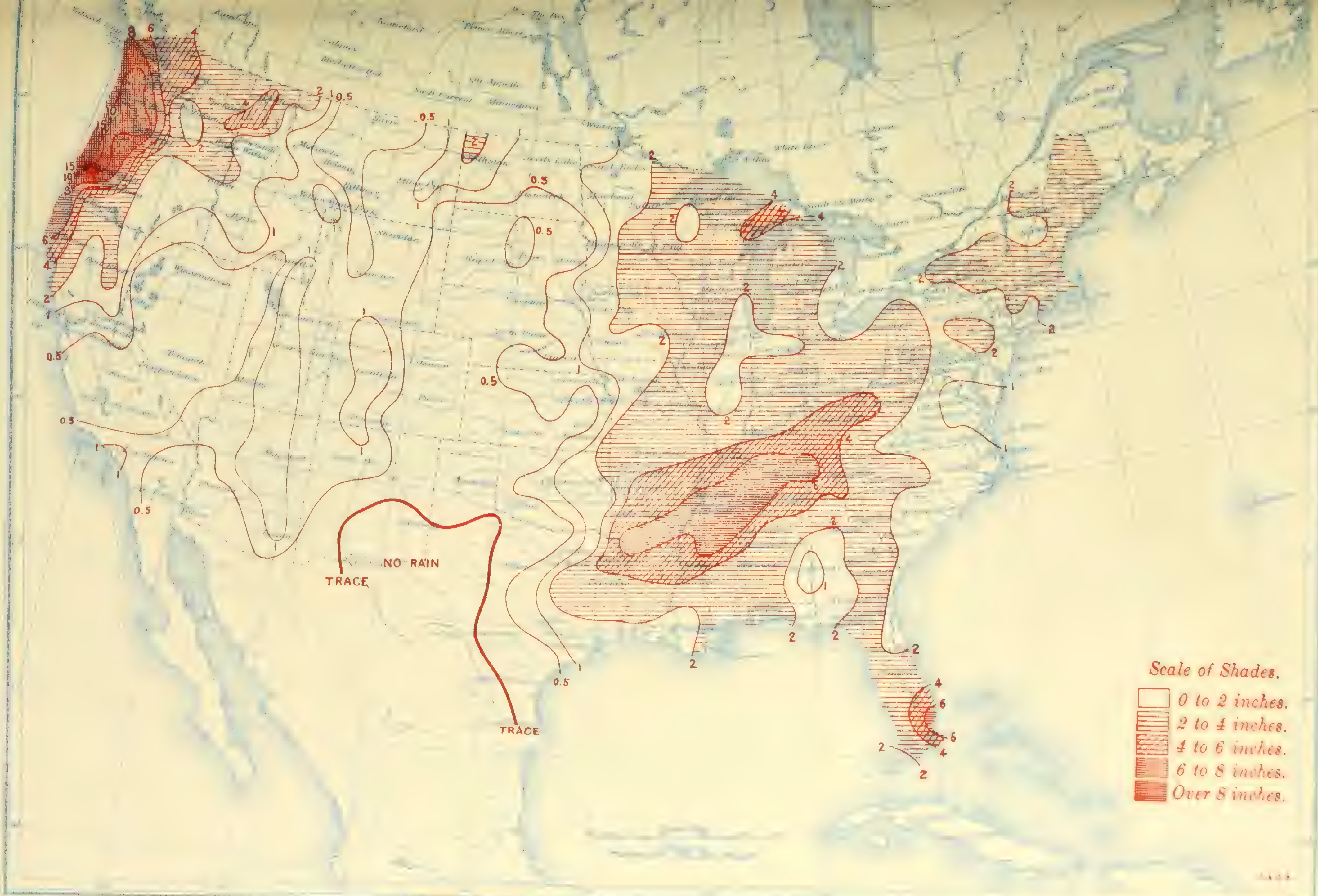
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn ssee; (O) Ohio; (M) Mississippi.

Daily temperatures for November, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	80	68	68	74	76	80	80	66	68	78	76	55	54	46	41	54	63	51	42	65	49	45	56	65	70	62	58	50	43	43	..	60.9
	Minimum	47	48	32	38	49	49	55	59	45	42	54	46	31	42	26	25	29	50	39	34	41	23	35	29	49	55	38	38	28	22	..	39.9
Blandville	Maximum	81	67	67	73	80	81	79	71	65	76	72	60	55	48	42	54	62	55	49	66	57	46	67	65	72	69	61	52	44	43	..	62.6
	Minimum	57	51	39	44	43	57	62	59	44	51	58	43	36	36	24	30	35	46	39	36	41	27	37	36	56	48	37	41	29	24	..	42.2
Calhoun	Maximum	83	77	70	76	78	83	81	75	68	76	75	71	55	51	46	55	63	10	51	66	64	47	52	65	70	67	59	54	45	44	..	64.2
	Minimum	60	48	32	42	51	52	60	59	42	43	53	43	31	42	24	26	30	43	36	33	40	24	34	30	52	50	37	39	26	20	..	40.1
Earlington §§	Maximum	84	70	73	75	82	85	84	66	70	82	78	56	55	46	40	55	67	52	43	67	49	48	57	67	71	63	62	50	45	45	..	62.9
	Minimum	60	44	31	35	50	50	58	59	42	42	48	42	30	34	27	36	27	30	40	35	41	22	29	28	35	54	38	40	28	20	..	38.5
Hopkinsville	Maximum	81	73	67	74	79	82	80	70	68	76	77	69	54	50	49	49	63	58	50	55	60	50	57	63	71	64	57	53	44	43	..	62.9
	Minimum	56	52	33	41	64	61	56	58	47	47	63	43	33	40	23	25	48	47	39	33	36	24	36	29	50	53	37	40	25	22	..	42.0
Marion	Maximum	77	75	67	72	79	80	79	74	66	76	73	64	53	43	48	53	61	56	52	63	58	46	55	65	73	..	..	..	..	..	..	ᵉ64.5
	Minimum	49	41	40	38	53	58	63	58	43	46	63	43	38	43	23	29	31	43	36	34	40	26	36	33	53	..	..	..	..	..	..	ᵉ42.4
Owensboro §§	Maximum	79	70	68	73	73	80	78	79	69	74	79	60	55	46	39	52	62	50	40	64	43	42	45	62	59	61	61	45	42	41	..	59.7
	Minimum	54	48	34	41	49	50	59	60	44	46	52	55	34	43	26	25	32	37	39	37	37	25	32	31	51	51	39	45	27	21	..	40.8
Central Division																																	
Alpha	Maximum	75	71	76	73	70	76	78	79	71	76	71	63	53	54	50	48	60	59	46	55	55	46	56	67	69	58	57	59	49	44	..	62.1
	Minimum	62	62	34	47	58	60	60	64	63	44	63	53	36	50	32	26	29	46	41	39	46	25	44	31	54	57	44	49	23	24	..	45.9
Anchorage	Maximum	78	66	64	70	68	69	79	71	63	72	76	63	54	45	44	46	60	56	47	60	55	42	52	59	71	61	57	57	41	38	..	59.5
	Minimum	58	38	32	41	41	41	51	55	41	45	61	33	31	41	27	23	26	41	35	32	34	19	31	26	42	52	36	35	25	19	..	37.1
Bardstown §§	Maximum	85	68	66	73	66	81	80	69	67	78	76	55	52	45	42	52	63	59	41	60	48	45	55	62	72	64	58	50	42	42	..	60.5
	Minimum	44	50	32	41	48	46	51	54	45	41	53	50	30	38	30	24	32	40	39	33	40	22	24	28	40	54	42	40	30	19	..	39.0
Bowling Green §§	Maximum	80	79	69	74	80	81	81	67	68	78	77	66	67	49	40	63	63	51	42	63	53	53	51	64	72	61	57	53	43	42	..	62.9
	Minimum	50	49	32	35	48	46	53	49	48	41	55	44	32	40	23	21	24	40	37	29	32	23	24	23	27	50	36	36	26	21	..	36.5
Edmonton	Maximum	79	69	65	69	75	79	79	76	68	78	75	71	65	50	48	48	50	55	52	58	55	45	55	61	70	61	62	56	42	40	..	61.9
	Minimum	58	48	30	34	55	47	57	49	52	47	62	49	30	42	38	22	25	42	35	33	38	21	31	26	47	50	45	33	28	19	..	39.8
Eubank §§	Maximum	79	70	79	74	69	..	81	76	..	..	80	70	50	54	46	55	68	60	51	60	51	50	65	65	71	63	62	60	50	43	..	ᶜ63.0
	Minimum	33	52	28	28	35	36	..	45	51	..	..	42	31	35	31	20	25	25	39	33	34	18	19	25	25	45	43	36	29	16	..	ᶜ32.6
Frankfort	Maximum	80	79	65	72	73	79	78	75	72	74	77	78	56	57	52	52	62	60	57	60	63	48	53	57	73	71	66	58	46	42	..	64.5
	Minimum	53	52	31	35	50	45	45	46	45	41	55	47	29	40	31	25	27	38	38	33	40	24	34	27	36	52	42	32	29	20	..	38.1
Franklin	Maximum	81	70	66	74	78	81	81	72	65	77	75	69	52	51	47	51	63	57	50	62	56	45	58	62	69	61	56	55	46	43	..	62.4
	Minimum	56	50	38	45	54	58	57	58	52	45	62	40	37	45	25	26	33	48	37	34	40	27	36	35	51	46	39	42	27	22	..	42.2
Greensburg §§	Maximum	80	69	66	73	73	81	81	73	65	78	76	56	53	49	42	52	63	57	42	60	51	44	57	62	70	63	56	58	43	41	..	61.1
	Minimum	39	52	30	32	40	44	45	46	51	39	44	53	31	35	30	23	25	32	40	34	36	21	24	26	29	52	44	34	30	20	..	36.0
Irvington	Maximum	77	70	62	70	65	77	76	69	64	72	74	63	54	49	43	50	59	52	50	61	58	41	52	59	69	62	54	52	40	40	..	59.5
	Minimum	46	58	35	45	53	46	60	56	45	43	63	43	33	43	28	28	33	44	34	34	34	25	37	33	42	50	42	38	28	20	..	40.6
Leitchfield	Maximum	79	70	63	72	72	80	79	66	64	76	74	60	53	47	42	50	62	53	50	62	55	43	54	62	71	65	56	50	44	41	..	60.5
	Minimum	56	47	32	38	51	47	53	52	46	41	60	42	31	42	27	23	27	43	35	32	38	20	33	28	46	52	37	36	27	18	..	38.7
Lexington	Maximum	74	64	62	68	62	75	76	69	61	71	72	62	51	48	41	48	59	56	49	56	55	39	50	57	66	64	54	56	36	35	..	57.9
	Minimum	57	46	42	43	48	47	58	55	42	38	62	42	39	41	28	27	38	44	33	32	29	24	34	35	48	45	41	34	23	17	..	39.7
Loretto	Maximum	78	73	64	73	67	79	78	70	66	76	76	72	53	46	46	52	52	57	50	60	57	42	54	60	70	55	54	56	42	40	..	60.6
	Minimum	59	51	28	38	56	43	53	55	45	37	61	47	28	39	28	23	35	35	36	34	39	19	32	25	51	47	42	30	28	17	..	38.7
Louisville	Maximum	77	65	62	70	63	78	78	66	61	70	74	56	54	46	40	50	60	52	49	60	56	41	53	58	69	61	54	51	39	40	..	58.4
	Minimum	60	48	42	47	51	48	62	56	43	44	56	43	35	34	29	29	37	45	36	34	31	27	38	37	50	46	42	32	24	21	..	40.9
Do. (Cherokee Park)	Maximum	77	73	60	70	66	77	77	74	66	69	76	71	54	50	47	50	58	54	49	60	58	42	52	58	69	66	61	53	42	38	..	60.6
	Minimum	58	52	33	40	48	41	52	55	40	39	60	46	30	40	28	26	29	42	35	31	39	24	34	29	43	52	41	38	28	19	..	39.1
St. John §§	Maximum	78	65	65	71	68	80	78	64	60	75	73	54	50	40	44	50	60	53	40	58	58	59	60	70	67	60	54	52	40	43	..	59.6
	Minimum	44	50	32	34	46	44	41	53	44	41	42	48	30	33	27	22	25	30	38	32	40	37	42	44	58	54	39	25	28	19	..	38.4
Scott	Maximum	75	70	60	69	64	72	77	69	63	65	74	70	57	47	44	48	58	55	49	57	54	40	51	52	69	63	58	55	40	47	..	59.1
	Minimum	58	47	31	40	42	42	54	55	41	38	49	44	32	38	27	24	27	32	35	33	34	20	32	28	40	50	42	34	27	18	..	37.1
Shelby City	Maximum	79	75	64	73	68	80	81	77	65	78	74	70	51	49	47	51	62	60	52	57	56	43	55	60	70	61	58	58	42	39	..	61.8
	Minimum	58	53	30	36	57	43	52	50	48	37	59	48	28	38	30	22	28	40	34	34	40	21	29	25	43	49	43	30	28	16	..	38.3
Shelbyville §§	Maximum	78	66	65	71	61	80	79	62	65	73	74	51	52	47	41	51	60	54	41	60	46	44	52	59	71	61	56	55	41	40	..	58.6
	Minimum	48	50	30	32	42	43	49	51	40	40	42	47	29	31	31	23	26	34	36	31	36	21	26	27	35	47	40	35	27	16	..	35.5
Taylorsville	Maximum	77	71	60	70	63	77	75	64	62	71	75	72	52	49	44	49	58	57	51	58	56	40	52	57	68	61	52	54	42	38	..	59.2
	Minimum	54	48	29	32	51	40	43	46	43	41	56	45	28	38	31	23	25	40	37	34	39	21	32	25	38	53	42	32	30	18	..	37.1
Williamstown §§	Maximum	77	63	65	69	63	79	79	63	63	84	75	74	57	46	40	50	62	56	39	58	46	42	45	51	71	64	56	57	41	38	..	59.1
	Minimum	49	47	33	33	46	40	40	56	38	37	56	46	34	34	27	23	26	30	36	31	32	20	20	30	31	43	40	34	27	16	..	35.2
Eastern Division																																	
Beattyville §§	Maximum	81	68	66	77	70	82	84	79	75	79	78	58	53	53	44	54	66	61	43	61	53	47	59	63	47	72	60	63	42	41	..	62.6
	Minimum	32	57	28	30	34	40	41	42	44	37	39	51	30	32	34	22	23	24	35	36	38	21	21	23	24	30	37	29	30	21	..	32.8
Berea	Maximum	78	71	49	72	65	68	79	70	64	76	74	73	52	47	47	50	63	52	52	56	55	43	55	65	56	69	59	60	42	39	..	60.0
	Minimum	58	49	39	37	55	55	56	57	51	44	44	46	28	41	31	24	32	45	35	35	28	24	27	27	49	53	42	34	29	19	..	40.1
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville §§	Maximum	80	65	61	71	65	75	82	76	64	76	79	55	78	48	42	51	64	59	45	58	50	43	54	54	72	66	63	62	42	38	..	61.3
	Minimum	40	50	28	30	41	34	37	41	43	34	37	53	28	31	31	22	24	25	36	35	24	24	23	27	27	34	44	28	20	20	..	33.0
Middlesboro	Maximum	75	71	67	..	..	..	..	..	..	..	..	78	67	65	60	56	63	60	54	56	56	47	56	62	66	70	58	59	56	40	..	ʰ61.0
	Minimum	55	55	39	..	..	..	..	..	..	..	..	39	30	45	30	28	24	34	25	35	44	23	27	24	30	34	40	32	34	24	..	ʰ34.6
Mount Sterling §§	Maximum	78	60	59	70	60	74	76	76	60	70	74	55	51	48	49	46	56	57	42	54	45	48	51	58	65	67	59	51	37	38	..	57.8
	Minimum	46	50	30	34	41	43	44	49	47	41	41	52	28	31	32	22	23	29	42	32	25	21	26	25	35	43	43	37	29	18	..	35.6
Richmond §§	Maximum	78	69	65	72	65	79	80	75	68	75	74	52	53	49	42	49	64	57	41	56	49	41	55	60	68	68	55	60	40	38	..	59.9
	Minimum	55	52	37	42	49	45	57	58	50	41	55	55	23	40	31	25	37	38	40	34	40	24	36	31	45	52	43	38	29	19	..	41.0
Weeksbury	Maximum	80	68	60	75	69	77	80	74	70	79	78	69	68	65	64	52	61	58	55	53	55	58	59	64	70	68	65	56	54	58	..	64.7
	Minimum	32	52	32	33	54	42	50	48	54	38	50	34	36	35	32	24	28	35	36	34	26	27	28	33	35	53	41	30	31	22	..	36.2
Williamsburg §§	Maximum	77	68	71	74	75	76	80	81	79	78	78	65	62	63	53	52	62	62	54	58	60	50	60	60	66	70	68	60	55	45	..	65.4
	Minimum	43	53	30	32	39	41	42	43	47	48	40	56	25	36	24	23	28	30	38	34	27	22	23	26	27	38	41	45	20	25	..	35.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

ᵃ, ᵇ, ᶜ, etc. indicate respectively 1, 2, 3, etc. days missing from record.


NO RAIN
TRACE
TRACE
Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

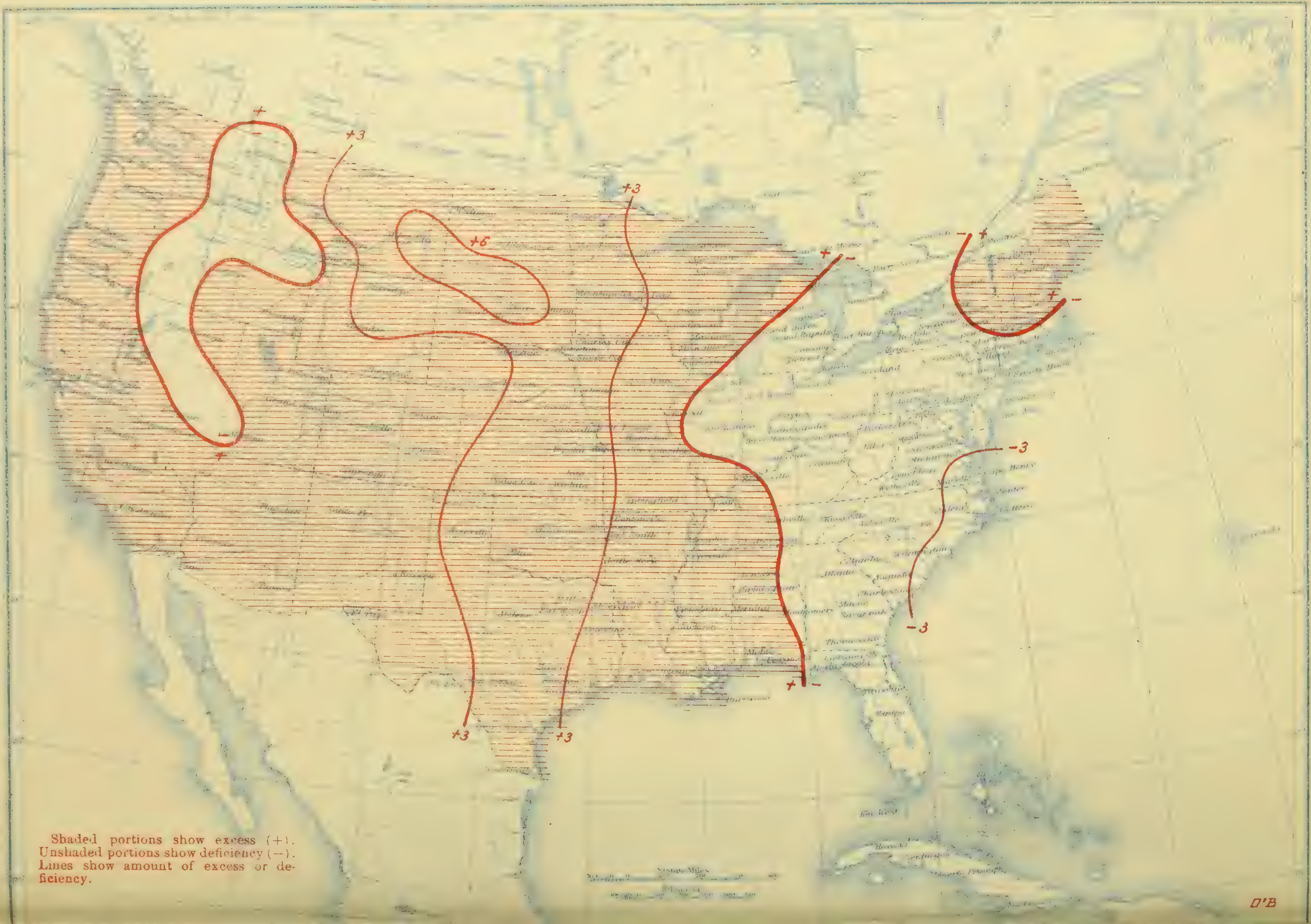
KENTUCKY SECTION

DECEMBER, 1915

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JANUARY 24, 1916

Departure of the Mean Temperature from the Normal, December, 1915.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XX. Louisville, Ky., December, 1915. No. 12

GENERAL SUMMARY.

The mean temperature for the State for December averaged nearly normal, without marked extremes. Mean temperatures were generally below normal during the first half of the month, and considerably above normal on most days during the last half, the coldest days being the 14th and 15th.

The average precipitation was the greatest on record for the State for December, being nearly twice the normal amount. Most of it occurred in two periods, 11-18th and 24th-31st; but more than half the total monthly amount at most stations fell on the 16th and 17th, 24-hour amounts on these days ranging generally between 1.5 and 4.5 inches. Small streams over the State rose quickly to unusual heights causing considerable damage by eroding farm lands, flooding dwellings on their banks, and interrupting railroad and interurban traffic. Although practically preventing outdoor work, the rainy weather of the last two decades was favorable for handling and marketing tobacco, which had been retarded by insufficient atmospheric moisture during the preceding three weeks.

PRESSURE.

Weather conditions over the State were dominated by high pressure areas during the first decade of the month; the only low of consequence passing across the Lake region on the 8th. During the second and third decades, however, strong storm formations moved across the central valleys with remarkable frequency and practically all of these disturbances moved up from the southwest heavily laden with moisture; hence, precipitation over the State was abnormally large. The storm periods were about as follows: 10-12th, moderately heavy rain; 15-17th, heavy rain and snow; 23d-24th, moderately heavy rain; and 27-29th, heavy rain and snow. The month closed with another storm area threatening from the southwest.

The mean sea-level pressure for the State, based on the records of two stations, was 30.10 inches. The highest was 30.53 inches at Louisville on the 6th, and the lowest 29.25 inches at Lexington on the 29th.

TEMPERATURE.

The mean temperature for the State, as determined from the records of 36 stations, was 37.0°, which is 0.5° below the December normal. The monthly extremes were 64° on the 16th at Greensburg, on the 17th at Beattyville and Edmonton, and on the 27th at Williamsburg; and 9° at Scott on the 15th. This maximum is unusually low and the minimum rather high for December.

PRECIPITATION.

The average precipitation for the State, based on the records of 46 stations, was 7.56 inches, or 3.77 inches in excess of the normal December amount. At the various stations the monthly amounts ranged between 5.36 inches at Farmers and 10.02 inches at Calhoun. Over the extreme eastern counties and a small area in the lower Licking basin, monthly amounts were slightly less than 6 inches. From 8 to 9 inches occurred over the upper basins of the Kentucky and Salt rivers, over the northwestern border counties from Henderson to Henry, and in the extreme southwestern part of the State. From 6 to 8 inches occurred over the remainder of the State. Snowfall was mostly light, the greater portion of it occurring on the 15th and 28th; but there was also a considerable amount in the eastern counties on the 13th.

WIND.

The total wind movement at Louisville was 9013 miles and at Lexington 10776 miles, the average hourly velocity being 12.1 and 14.5 miles, respectively. The maximum velocity for 5 minutes was at the rate of 44 miles per hour at Louisville from the southwest on the 25th, and 56 miles per hour at Lexington from the southwest on the 29th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 80 per cent and at 7 p. m. 71 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 40 and at Lexington 28. At Louisville there were 14 days with absolutely no sunshine.

MISCELLANEOUS.

The melting snow on the 15th followed immediately by the heavy rains of the 16th and 17th caused a rapid rise in all streams of the State. The Kentucky River reached a crest of 37.2 feet at Frankfart and 36.5 feet at Beattyville on the 19th. The Ohio River rose rapidly until the 22d, exceeding the flood stage by a few feet in the stretch from Cloverport to Cairo, Ill. The river stage, 25.5 feet at Louisville on the 23d is the highest on record for December at that place. Another considerable rise began in the Ohio on the 30th, and stages were high and increasing rapidly at the close of the month.

Thunderstorms occurred in the central and western counties on the 16th, a residence at Princeton being set on fire by lightning and destroyed.

On December 7th, about 12.40 p. m., an earthquake shock of unusual severity for that section was felt generally over that part of the State between the Mississippi and Tennessee rivers. No actual damage was reported, but furniture was moved, dishes rattled, and a loud rumbling noise accompanied the shock, which lasted about 15 seconds.

Comparative Data for December

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	50.2	+12.7	76	13	1.57	−2.22	..
1890	37.8	−0.3	70	12	3.51	−0.28	..
1891	42.4	+4.9	70	15	4.10	+0.31	.
1892	34.6	−2.9	74	−3	4.22	−0.43	.
1893	39.0	+1.5	78	10	2.69	−1.10	..
1894	38.7	+1.2	76	−11	4.31	+0.52	10
1895	38.8	+1.3	77	6	4.43	+0.64	9
1896	39.6	+2.1	73	7	1.82	−1.97	4
1897	38.0	+0.5	72	3	3.75	−0.04	10
1898	34.1	−3.4	70	−12	2.74	−1.05	8
1899	34.8	−2.7	70	−15	4.26	+0.47	10
1900	38.6	+1.1	70	12	2.59	−1.20	8
1901	32.3	−5.2	72	−22	4.90	+1.11	10
1902	36.7	−0.8	72	−3	7.36	+3.57	12
1903	30.7	−6.8	58	0	2.88	−0.91	7
1904	36.4	−1.1	72	−2	4.30	+0.51	11
1905	37.3	−0.2	66	11	4.38	+0.59	8
1906	39.0	+1.5	76	−9	5.64	+1.85	15
1907	38.5	+1.0	70	8	3.20	−0.59	11
1908	39.8	+2.3	74	7	2.42	−1.37	9
1909	29.9	−7.6	79	−14	3.46	−0.33	9
1910	31.1	−6.4	66	−3	3.37	−0.42	8
1911	41.6	+4.1	74	11	6.25	+2.46	12
1912	37.2	−0.3	73	5	3.98	+0.19	9
1913	39.5	+2.0	70	11	2.73	−1.06	7
1914	32.8	−4.7	70	−16	5.22	+1.43	14
1915	37.0	−0.5	64	9	7.56	+3.77	12

Climatological data for December, 1915.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	38.0	+2.0	60	16	21	20	29	8.91	+5.19	2.80	4.0	12	13	4	14	E	W. T. Austin.
Blandville	Ballard	445	33	39.2	+2.4	62	16	20	28	27	8.84	+4.89	2.84	3.6	11	10	4	17	S	E. W. Horr.
Calhoun	McLean	437	11	38.4	+0.1	60	17	21	14	29	10.02	+6.16	3.30	2.2	12	4	14	13	NW	W. A. Taylor.
Earlington	Hopkins	420	24	37.3	−1.9	61	16	21	14	32	7.71	+3.85	2.80	2.0	9	14	1	16	SE	Brick Southworth.
Hopkinsville	Christian	524	18	40.2	+2.4	63	17	22	20	32	8.09	+3.32	2.18	2.0	9	13	0	18	E	W. F. Randle.
Marion	Crittenden	571	17																	B. C. Paris.
Owensboro	Daviess	479	17	39.5	−2.9	59	16	22	28	25	8.67	+4.81	2.97	2.0	12	9	5	17	NW	Henry S. Berry.
Paducah	McCracken	341	26								7.92	+4.08	2.33	3.0	10					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	40.8	+0.4	62	17†	21	20†	32	7.13	+2.39	1.90	1.3	8	12	3	16	N	W. W. Hicks.
Anchorage	Jefferson	700	13	34.8	+0.9	58	17	17	15	28	8.38	+4.38	2.70	5.5	13	14	0	17	NW	C. E. Barret.
Bardstown	Nelson	637	17	37.2	+0.9	60	16	20	20	35	7.63	+3.52	1.87	3.5	12	11	3	17	SW	Chas. M. Talbott.
Bowling Green	Warren	500	25	37.4	−0.9	63	17	19	1	37	6.33	+2.16	1.80	1.5	9	17	6	8	N	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								7.89	+3.84	1.98	T.	10					C. L. Hurt.
Cloverport	Breckenridge	375	1								9.13		4.42	3.0	11					W. A. Cockerill.
Edmonton	Metcalfe	600	23	38.8	+1.2	64	17	19	10†	34	7.43	+3.16	1.90	0.7	12	7	9	15	S	Miss Lee Ray.
Eubank	Pulaski	1177	20	[a]37.6	+[a]1.9	60[a]	16†	15[a]	21	36[a]	8.76	+5.34	2.45		10	6[a]	5[a]	19[a]	E	Mrs. Katie Payne.
Frankfort	Franklin	560	23	37.8	+0.5	59	17	18	15	28	7.84	+4.48	2.60	1.7	13	10	6	15	S	Mrs. Amelia Wood
Franklin	Simpson	691	20	40.4	+0.4	63	17	24	20	30	8.02	+3.74	3.50	1.5	8	1	16	14	SW	J. E. Newman.
Greensburg	Green	581	22	37.4	+1.4	64	16	19	21	37	7.86	+3.81	2.55	T.	12	0[a]	18[a]	12[a]	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								7.74	+2.35	1.30	1.0	11					Miss Lulu Wood.
Irvington	Breckenridge	646	17	38.0	+2.2	62	17	22	14	32	8.12	+4.43	3.19	3.0	10	14	3	14	NW	W. J. Piggott.
Leitchfield	Grayson	635	19	37.8	+2.0	62	17	20	20	33	9.00	+4.38	2.63	1.6	10	11	4	16	W	John E. Stone.
Lexington	Fayette	989	30	35.8	−0.6	60	17	20	14	31	6.67	+3.35	2.50	2.6	13	8	6	17	SW	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	36.9	+0.7	60	17	13	7	37	7.83	+3.75	2.02	1.7	14	7	9	15		Loretto Academy.
LOUISVILLE	Jefferson	525	42	36.7	−1.4	58	17	22	14	30	8.43	+4.70	4.41	6.2	13	5	8	18	S	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	530	5	35.6		57	17	19	20	27	8.84			4.6	13	12	2	17	SW	Wm. I. Hunt.
St. John	Hardin	777	18	35.4	+0.8	59	16	19	1†	34	8.57	+4.15	2.61	1.5	10	11	2	18	N	Sisters of Loretto.
Scott	Kenton	900	17	33.4	+0.6	56	17†	9	15	25	5.50	+2.44	2.38	5.0	12	3	11	17	S	E. B. Wilson.
Shelby City	Boyle	1087	20	37.0	+1.7	58	17†	18	15	31	9.25	+5.02	2.87	3.5	12	11	5	15	SW	H. F. Ewing.
Shelbyville	Shelby	825	25	34.6	−1.3	57	16	17	15	35	7.87	+4.21	3.80	5.6	13	8	6	17	W	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	35.8	+0.8	58	17	19	15†	28	8.41	+4.12	2.60	6.4	15	7	6	18	W	E. D. Bourne.
Williamstown	Grant	943	12	33.4	−0.6	57	16	12	15	35	6.76	+3.36	2.61	13.5	11	5	6	20		Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	36.3	+1.7	64	17	15	22	40	8.06	+3.80	1.78	5.9	14	4	12	15	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	36.9	+0.2	57	17	17	15	29	6.99	+2.40	2.00	10.8	14	17	2	12	NW	C. F. Rumold.
Catlettsburg	Boyd	534	26								5.76	+2.62	1.72	2.0	13					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25								6.44	+3.33	2.01	3.0	14	9	3	19	W	J. V. Oldham.
Farmers	Rowan	668	8	35.2	−0.3	60	17	10	15	32	5.36	+1.76	1.60	3.2	9	14	4	13	W	Mrs. Lurlene Triplett.
Hazard	Perry		1																	
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								6.06		1.80	T.	11					C. R. Lee.
Louisa	Lawrence	584	10								5.76	+1.90	1.38		9					G. M. Guerin.
Manchester	Clay	1400	3								6.64		1.03		11					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	33.7	−0.2	58	17†	10	15	39	6.89	+3.26	2.08	4.2	17	9	5	17	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	38.0	+0.1	61	17	18	7†	31	6.67	+2.52	1.40	T.	11	12	7	12		B. H. Perkins.
Mount Sterling	Montgomery	930	24	34.1	−1.3	60	17	11	15	30	7.19	+3.24	2.73		12	13	9	9	NW	H. Clay McKee.
Pikeville	Pike	634	8								5.92	+1.66	1.24	2.0	9					I. M. Williams.
Richmond	Madison	926	22	37.6	+0.3	60	17	19	15	31	8.11	+4.45	1.54	1.1	12	13	2	16		J. W. Crooke.
Weeksbury‡‡	Floyd	1216	1	34.0		58	16	18	7	30	6.25		1.60	7.0	10	18	2	11		O. A. Lund.
Williamsburg	Whitley	939	18	39.2	+0.9	64	27	18	5	34	6.91	+3.22	2.50	1.5	12	11	1	19	W	N. C. Jones.
State averages and extremes				37.0		64	16†	9	15	40	7.56		4.42	3.3	12	10	6	15	W	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used n determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for December, 1915.

Day of month

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
aver Dam‖	G		.15									.2	.12			T	2.52	2.80	.30							.16	[illegible]	[illegible]	[illegible]	[illegible]	.14		[illegible]
andville	M	.06									T	.86	.01			.38	2.84	.73							[illegible]			.29	.99	1.70			[illegible]
alhoun	G	.12									T.	.85	.03	.05		.15	3.30	[illegible]							[illegible]	[illegible]			[illegible]	[illegible]		T.	10.42
arlington	G		T									.60	.17			.20	1.73	2.80	[illegible]							.24			1.07	.73			7.71
opkinsville	C	.05										.54				.50	1.60	2.18								.32			.45	1.00			[illegible]
arion	O																																
wensboro	O	.11									T	.90	.11			.10	2.97	1.87	.28						[illegible]	.30			[illegible]	[illegible]			
aducah	O		T.									[illegible]	[illegible]			.10	[illegible]	[illegible]	[illegible]							.60			1.20	1.35	.05		
Central Division																																	
lpha	C	T										.75	[illegible]	.03		1.80	T	[illegible]	T						[illegible]	.16		[illegible]	.90	T.			[illegible]
nchorage	O	.13										.89	[illegible]	.02		.11	2.25	2.70							.08	[illegible]		[illegible]	.80	.46	.04		[illegible]
ardstown	S		.18									.10	.66	.09			.65	1.87	1.39							1.10			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
owling Green	G		.25								T	.50	.08	.05		.15	1.80	1.45	1.20							.85			T				6.33
urnside	C		.28									.15	.55	.08	T	T.	1.70	.55	1.98							.75	T.		.70	1.15	T.		[illegible]
loverport	O		.30									.55	.25	.12			1.80	4.42	.31				T			.25	T		[illegible]	[illegible]	[illegible]	[illegible]	9.13
dmonton	G		.11									.58	.09	.15		.30	1.90	1.60	.26	.01						.89			.87	.67			[illegible]
ubank	C		.20									.15	[illegible]	[illegible]			2.45	.42	1.57							1.04			.80	1.00			[illegible]
rankfort	K		.18									.08	.60	.13	.02		.53	2.60	1.15					.04		.98	T.		.73	.78	.02	T.	[illegible]
ranklin	G	.19				T						.10	T	T		.90		3.50							T.	1.18			1.60	.45		.40	[illegible]
reensburg	G		.23									.30	.46	.15		T.	2.55	.76	1.18							.62	T.	.02	.87	.71	.01		7.86
igh Bridge	K		.11									.06	.80	.17	.01		1.25	1.10	1.30							.48			.86	.60			[illegible]
vington	O	.22										.69	.06	T.		T.	2.35	3.19							.22	.10		[illegible]	[illegible]	[illegible]			8.12
eitchfield	G	.13										.88	T.			1.05	2.63	2.08							1.11	T.		*	.86	.15		.11	[illegible]
exington ***	K	.10										.50	.08	.07		.40	2.32	1.43	.06						T	.57		.09	.66	.38	.01		[illegible]
oretto	S	.09				.01							.68	T		.02	2.00	2.02	.11						.03	.95	.07	.03	.97	.83	.02		[illegible]
ouisville***	O	.27									T.	.83	.05	T		.46	3.63	1.67	T.	T				T	.15	.22		.37	.64	.14	.01	.01	8.43
Do (Cherokee Park)	O	.19										.93	.04	.08		.14	*	5.60						.01	.08	.55		.05	.82	[illegible]			8.84
t. John	S		.15									.43	.50				2.18	2.61	.90	.15					.50				.80	.35			[illegible]
cott	L	.09	T	T						T		.15	.15	.10			.70	2.38	.01	T.					.05	.44		.01	.69	.73			5.50
helby City	K		.24									.85	.12	.04		.30	2.87	1.50	.37							1.18			.95	.80	.03		9.25
helbyville	S		.15									.11	.20	.08	T.		.40	3.80	1.08					[illegible]		.68	T		[illegible]	.32	.10	[illegible]	7.87
aylorsville	S	.12	.02								T.	.80	.03	.08		.18	2.00	2.60	.08						.04	.81		.05	.83	.75	.02		8.41
illiamstown	L		.06									.05	.27	.49			.31	2.61	.55							[illegible]			[illegible]	[illegible]		[illegible]	[illegible]
Eastern Division.																																	
eattyville	K		.09								T.	.05	.75	.23	.09		1.78	.77	1.76					.03		.29	.47		.50	1.16	.09		8.06
erea	K		.10									.78	.02	.01	.12	.10	2.00	.75	.76							.60		.28	.32	1.10	.05		[illegible]
atlettsburg	B	.02	.12									T.	.18	.26	.10		.24	1.10	1.72					.04		.32	.40		.42	[illegible]			5.76
almouth	L		.12								T.	.05	.38	.20	T.		.40	2.01	.86					.02		.81	.05		.80	.70	.02	.02	6.44
armers	L										.17			.05	T		1.60	1.00	.10							.60	T.		.53	1.15		[illegible]	[illegible]
azard	K																																
ackson	K																																
ondon	C												.45	.20	.02	T.	1.80	1.35	.30							.05	.13		.62	1.04	.10		6.06
ouisa	B												.35	.19			.20	1.20	1.38							.25	.44		.50	1.25			5.76
anchester	K				.37							.88	.61	.86				.78	.81	.63						.27	.40			.92	.11		6.64
aysville	O	.04	.12						.01			.05	.32	.29	.03		.30	2.08	1.45					.03		.53	.03		.68	.80	.10	.03	6.89
iddlesboro	C	.04										.41	.05		.10	.90		.50	1.40							1.00	.24		.63	1.40			6.67
ount Sterling	L		.15	.02								.20	.10				.12	1.02	2.73							.54	.41	T.	.25	1.12	.23		7.19
ikeville	B		T.						T.			.06	.46	.36	.06		1.06	.64	1.24					T.		T	.82		.16	1.06			5.92
ichmond	K		.15									.06	.80	.15			1.54	.95	1.50							.90	.06		.73	1.24	.03		8.11
eeksbury	B		T.									.70		.35		.25	1.60	.15	1.40								.85		.30	.35		.30	6.25
illiamsburg	C		.05	T.								.08	.50	.14	T.	T.	.90	.05	2.50							.70	.40		.32	1.25	.02		6.91

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

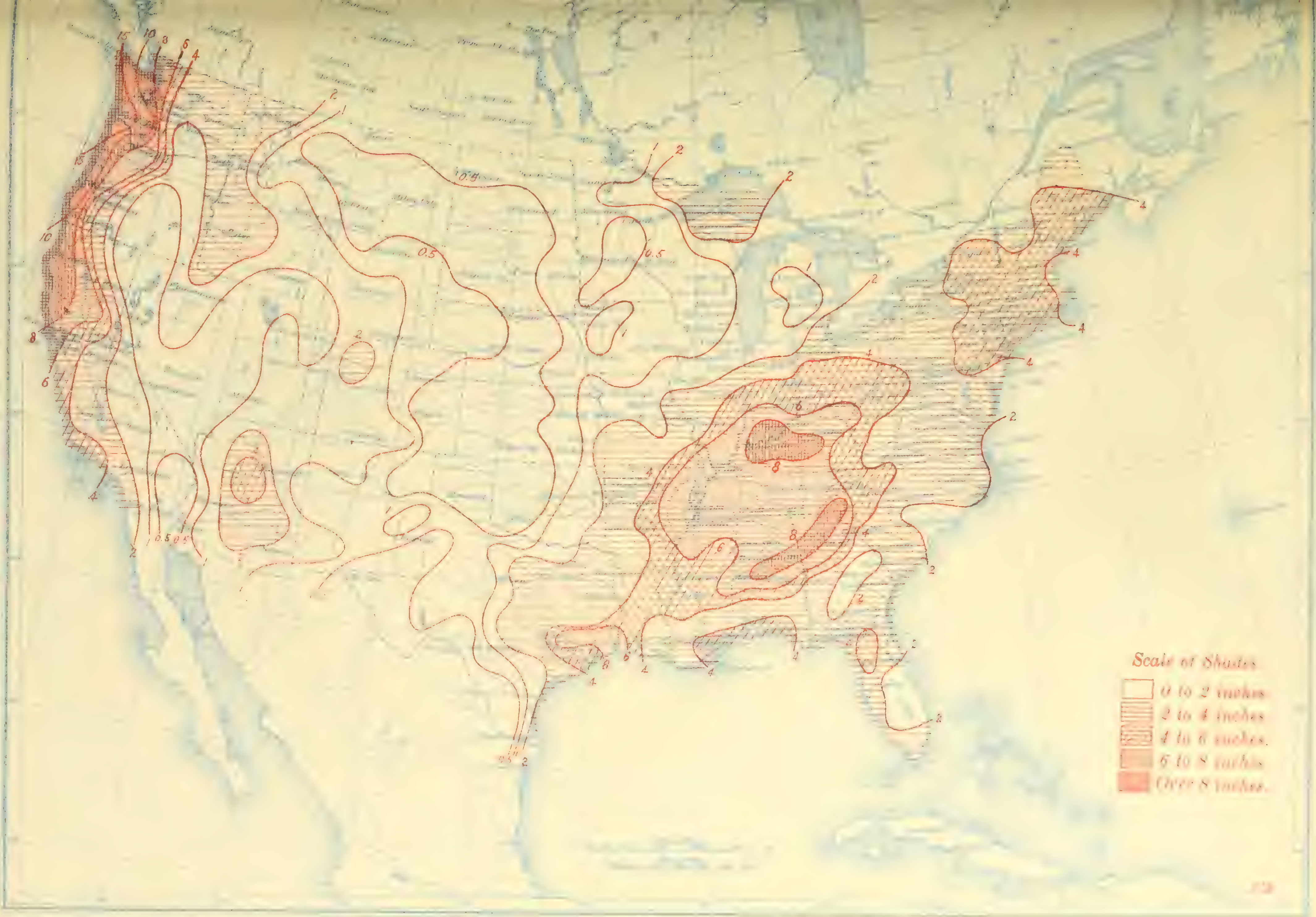
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn- ssee; (O) Ohio; (M) Mississippi.

Daily temperatures for December, 1915.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	45	45	49	54	55	45	52	53	45	43	45	38	36	36	40	60	41	32	39	45	49	53	56	49	35	49	55	37	40	41	56	45.7
	Minimum	33	29	25	25	33	28	25	32	28	23	33	37	33	24	26	32	39	31	28	21	26	34	45	36	35	25	37	25	32	34	29	30.4
Blandville	Maximum	48	43	52	54	52	46	48	58	47	54	48	39	44	35	37	62	61	37	41	45	49	54	54	57	37	50	50	32	33	36	50	46.9
	Minimum	35	29	30	28	39	30	27	36	29	33	39	34	33	25	31	37	33	29	31	26	29	32	41	37	29	27	32	20	29	33	34	31.5
Calhoun	Maximum	42	44	52	54	56	50	52	54	50	46	45	45	38	37	32	59	60	37	38	47	49	55	55	52	52	49	51	38	35	39	52	47.3
	Minimum	33	27	27	25	33	27	24	36	26	26	34	34	30	21	25	31	35	27	27	23	27	35	43	36	26	26	36	22	30	32	29	29.5
Earlington §§	Maximum	43	43	57	57	55	46	52	53	45	50	47	37	37	35	40	61	40	33	40	47	52	56	55	59	33	50	54	34	38	40	57	46.6
	Minimum	21	28	23	24	26	27	25	29	27	24	34	35	32	24	25	29	37	28	28	21	22	31	37	37	30	23	32	22	23	33	30	28.0
Hopkinsville	Maximum	43	45	50	54	55	45	48	54	48	48	45	45	44	37	35	60	63	47	42	51	49	54	58	60	59	51	59	57	45	42	55	49.9
	Minimum	33	29	24	26	29	30	27	33	26	28	38	34	32	25	29	34	36	30	28	22	24	34	43	40	29	25	38	25	31	36	30	30.6
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro §§	Maximum	41	41	49	50	45	51	49	51	40	44	44	45	50	55	53	59	43	35	44	46	53	53	51	56	47	46	34	35	37	50	53	46.8
	Minimum	27	29	27	29	32	27	29	35	29	28	35	35	37	42	50	45	35	28	28	24	28	32	42	38	29	27	33	22	32	32	31	32.2
Central Division																																	
Alpha	Maximum	48	40	43	57	58	46	51	50	38	37	42	42	41	36	34	60	62	49	41	39	45	52	57	59	38	44	59	49	43	44	62	47.3
	Minimum	35	37	26	29	37	28	22	35	33	26	41	41	32	26	29	54	49	31	33	21	21	34	47	38	31	29	49	43	37	40	30	34.3
Anchorage	Maximum	41	41	46	37	46	40	48	49	39	35	35	38	34	30	28	48	58	38	34	38	47	51	51	53	55	41	49	36	35	38	48	42.2
	Minimum	32	24	21	25	30	24	22	32	24	24	31	34	28	18	17	28	34	27	26	18	20	33	34	30	27	26	34	26	31	33	32	27.3
Bardstown §§	Maximum	44	44	47	50	49	42	51	51	40	36	40	41	33	30	34	60	58	31	38	42	48	53	56	57	35	43	55	42	40	42	55	44.7
	Minimum	30	31	25	26	28	24	23	33	27	25	27	33	32	23	22	25	50	29	27	20	23	30	40	36	35	25	37	30	35	34	35	29.7
Bowling Green§§	Maximum	44	44	49	53	52	46	50	52	45	47	46	39	35	36	41	49	63	53	41	43	47	54	58	62	49	48	58	59	45	49	62	49.0
	Minimum	19	28	24	23	24	24	21	21	26	20	31	35	29	22	23	26	26	27	25	20	20	23	31	33	29	21	35	30	29	32	27	25.9
Edmonton	Maximum	50	45	40	53	54	54	50	50	43	40	43	43	37	35	33	57	64	40	40	40	46	53	56	63	60	56	50	53	53	43	60	48.5
	Minimum	26	33	22	23	30	27	24	29	27	19	36	36	30	22	23	32	40	29	26	19	19	35	43	31	28	22	35	35	35	36	27	29.0
Eubank§§	Maximum	47	49	..	58	55	43	55	47	45	37	40	43	35	39	39	60	59	52	49	48	47	54	58	57	50	46	58	50	44	43	60	[a]48.9
	Minimum	15	30	20	..	22	23	21	22	24	23	25	33	30	23	20	25	38	29	26	17	15	18	35	34	31	23	25	38	35	34	31	[a]26.2
Frankfort	Maximum	46	44	46	45	46	47	46	51	51	44	42	46	43	39	34	46	59	40	41	39	47	52	55	58	48	46	54	57	45	45	57	47.1
	Minimum	29	31	24	24	30	25	21	34	28	26	30	33	30	21	18	24	36	28	27	21	21	34	35	33	30	26	35	29	31	34	36	28.5
Franklin	Maximum	45	45	49	55	50	48	50	51	44	47	47	45	38	37	35	62	63	40	41	43	47	54	58	62	58	47	58	54	53	43	57	49.2
	Minimum	31	31	29	31	36	28	25	35	29	27	40	36	28	24	28	34	38	29	28	24	27	35	41	38	28	25	38	32	34	36	31	31.5
Greensburg§§	Maximum	48	43	47	53	51	43	51	51	44	40	43	43	34	38	39	64	58	32	42	41	47	53	58	61	37	47	58	53	40	43	59	47.1
	Minimum	22	34	22	23	27	24	21	25	25	22	28	37	32	23	23	27	38	30	28	20	19	22	38	31	37	24	27	35	34	35	29	27.8
Irvington	Maximum	43	40	47	45	45	39	49	50	42	37	42	40	57	32	32	60	62	36	39	41	46	51	53	59	59	47	52	37	36	42	52	45.5
	Minimum	34	31	28	28	31	26	25	35	30	27	31	35	29	22	25	31	36	28	29	23	27	37	44	37	27	27	37	26	32	35	33	30.5
Leitchfield	Maximum	46	41	47	49	50	46	50	45	37	42	50	43	35	34	32	59	62	36	39	42	47	52	56	53	58	47	56	54	42	42	57	46.7
	Minimum	31	30	23	25	30	25	23	27	24	34	40	31	29	21	24	31	35	28	24	20	23	35	40	36	25	24	39	29	30	34	30	29.0
Lexington	Maximum	43	38	42	43	41	36	46	46	35	35	34	41	32	27	28	58	60	32	34	36	42	48	52	57	57	41	53	38	48	54	53	42.9
	Minimum	30	30	26	26	29	22	25	31	28	26	30	32	25	20	20	30	32	26	27	23	25	36	37	36	26	25	35	29	33	34	38	28.8
Loretto	Maximum	46	42	47	49	48	41	50	51	45	36	42	40	36	33	30	49	60	39	40	40	46	51	55	53	58	46	56	50	46	42	54	45.8
	Minimum	29	36	21	20	29	22	13	28	24	20	33	33	30	23	19	29	34	28	26	19	18	35	40	35	28	28	37	30	33	35	34	28.
Louisville	Maximum	41	41	46	44	45	40	46	50	38	37	38	38	34	31	31	57	58	31	35	38	46	50	52	56	56	44	51	33	37	40	49	43.0
	Minimum	34	30	30	28	31	27	27	35	32	29	32	34	29	22	24	31	31	27	28	25	29	39	40	38	26	26	32	24	33	34	34	30.
Do. (Cherokee Park)	Maximum	41	39	45	44	44	41	45	49	48	37	37	39	37	32	29	36	57	46	35	38	45	49	55	49	55	44	50	50	37	39	45	43.1
	Minimum	30	29	26	24	28	22	22	36	29	24	29	33	30	21	20	25	33	26	26	19	23	33	40	35	27	25	37	23	29	33	32	28.
St. John §§	Maximum	44	44	50	43	45	39	48	53	42	35	40	38	34	35	34	59	58	31	40	42	41	54	57	57	34	46	54	40	38	40	53	44.1
	Minimum	19	28	22	34	24	33	22	23	26	25	28	34	32	21	22	25	34	28	26	19	20	25	34	32	32	25	26	26	26	33	30	26.
Scott	Maximum	41	40	41	36	43	38	42	48	37	36	34	36	35	30	24	34	56	37	36	37	44	49	56	41	54	40	48	44	34	37	49	40.
	Minimum	27	27	23	25	26	21	18	35	31	21	27	30	29	17	9	24	33	25	26	20	19	31	33	31	30	24	34	26	26	32	34	26.
Shelby City	Maximum	45	44	45	48	46	41	50	49	47	35	39	42	37	31	29	47	58	44	37	41	45	52	58	55	57	45	55	52	49	42	57	45.
	Minimum	25	32	22	23	27	20	19	32	25	21	31	36	29	22	18	27	43	28	26	19	20	33	34	33	30	25	35	33	34	35	30	28.
Shelbyville §§	Maximum	48	44	46	44	45	41	47	49	38	36	37	39	32	30	33	57	56	30	36	40	46	51	54	55	33	46	50	36	37	40	54	42.
	Minimum	20	29	22	24	26	22	22	33	27	25	27	31	30	20	17	22	33	27	24	18	20	37	33	32	32	25	26	27	28	32	34	26.3
Taylorsville	Maximum	44	41	45	44	44	38	46	49	44	36	38	41	35	31	28	47	58	38	37	38	44	49	53	47	57	44	51	54	38	41	49	43.5
	Minimum	26	30	23	22	30	21	20	32	26	20	31	35	31	23	19	27	38	29	27	20	19	35	37	35	29	27	33	29	32	35	33	28.2
Williamstown §§	Maximum	44	41	40	41	44	42	40	50	36	39	33	37	32	28	30	51	56	54	38	39	46	43	53	55	54	47	49	36	36	39	54	42.8
	Minimum	16	26	23	24	25	22	20	19	26	22	19	27	26	17	12	16	26	26	24	19	19	21	35	29	30	33	23	26	26	31	33	23.
Eastern Division																																	
Beattyville §§	Maximum	50	46	46	50	46	42	50	52	37	38	37	44	33	35	33	60	64	32	42	40	49	55	59	60	46	44	56	49	50	43	62	46.8
	Minimum	22	27	21	24	25	19	16	17	27	20	20	31	32	27	16	21	32	32	30	20	25	15	28	27	32	27	26	41	32	37	31	25.8
Berea	Maximum	45	38	44	46	45	37	52	43	48	40	38	40	38	37	30	55	57	41	38	32	44	54	47	56	55	43	55	53	45	42	55	44.
	Minimum	27	30	24	25	30	22	23	35	20	20	30	36	30	27	17	27	40	28	28	19	26	36	38	34	29	24	35	34	35	35	32	28.
Farmers	Maximum	38	50	41	48	43	40	48	50	44	39	35	43	42	33	29	33	60	45	38	38	45	53	55	55	57	38	53	37	53	43	59	44.7
	Minimum	21	20	20	24	28	20	16	18	31	18	30	30	31	24	10	16	33	30	30	21	15	29	30	28	32	28	30	33	32	35	33	25.7
Maysville§§	Maximum	45	40	39	44	45	41	45	51	39	39	35	40	34	30	29	55	58	32	37	37	47	52	56	58	37	44	52	39	41	43	53	43.1
	Minimum	20	29	20	21	21	18	17	18	31	18	18	27	31	23	10	16	27	29	27	20	17	18	29	30	33	26	31	30	30	33	34	24.
Middlesboro	Maximum	46	44	45	52	53	46	47	54	46	42	42	41	40	37	32	44	61	58	45	38	43	47	59	55	55	37	52	51	56	44	56	47.
	Minimum	23	35	23	21	26	22	18	27	33	20	33	37	30	27	20	31	41	34	27	24	18	29	38	29	31	22	24	41	39	38	29	28.7
Mount Sterling§§	Maximum	44	43	42	42	40	40	44	41	36	42	38	32	34	27	34	37	60	35	36	42	47	49	52	57	36	39	39	47	51	44	54	42.1
	Minimum	24	32	22	24	28	27	17	30	25	22	30	22	26	16	11	29	30	26	25	18	20	24	33	32	31	26	32	31	32	31	33	26.1
Richmond §§	Maximum	45	45	43	50	47	46	47	49	49	36	52	44	32	29	34	55	60	37	37	38	45	51	56	58	40	45	55	49	41	42	58	45.
	Minimum	30	33	26	28	29	23	22	35	29	24	29	32	30	22	19	24	40	29	27	21	23	32	40	36	34	26	36	35	33	35	34	29.
Weeksbury	Maximum	40	38	38	35	37	35	34	43	34	36	39	40	29	28	29	58	55	32	34	29	32	37	50	52	45	44	44	46	38	39	49	39.
	Minimum	22	35	25	27	25	20	18	29	32	21	28	38	28	26	19	28	49	25	30	25	20	26	32	31	30	26	29	41	38	37	33	28.
Williamsburg §§	Maximum	48	43	49	47	45	47	48	54	46	43	45	42	40	37	43	61	52	58	55	49	50	54	59	54	48	50	64	54	51	42	53	49.
	Minimum	39	37	23	23	18	22	19	20	28	20	23	32	28	28	22	27	40	34	28	24	19	20	44	30	34	24	36	42	42	38	31	28.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
15
10
8
6
4
2
1
0.5

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CLIMATOLOGICAL DATA

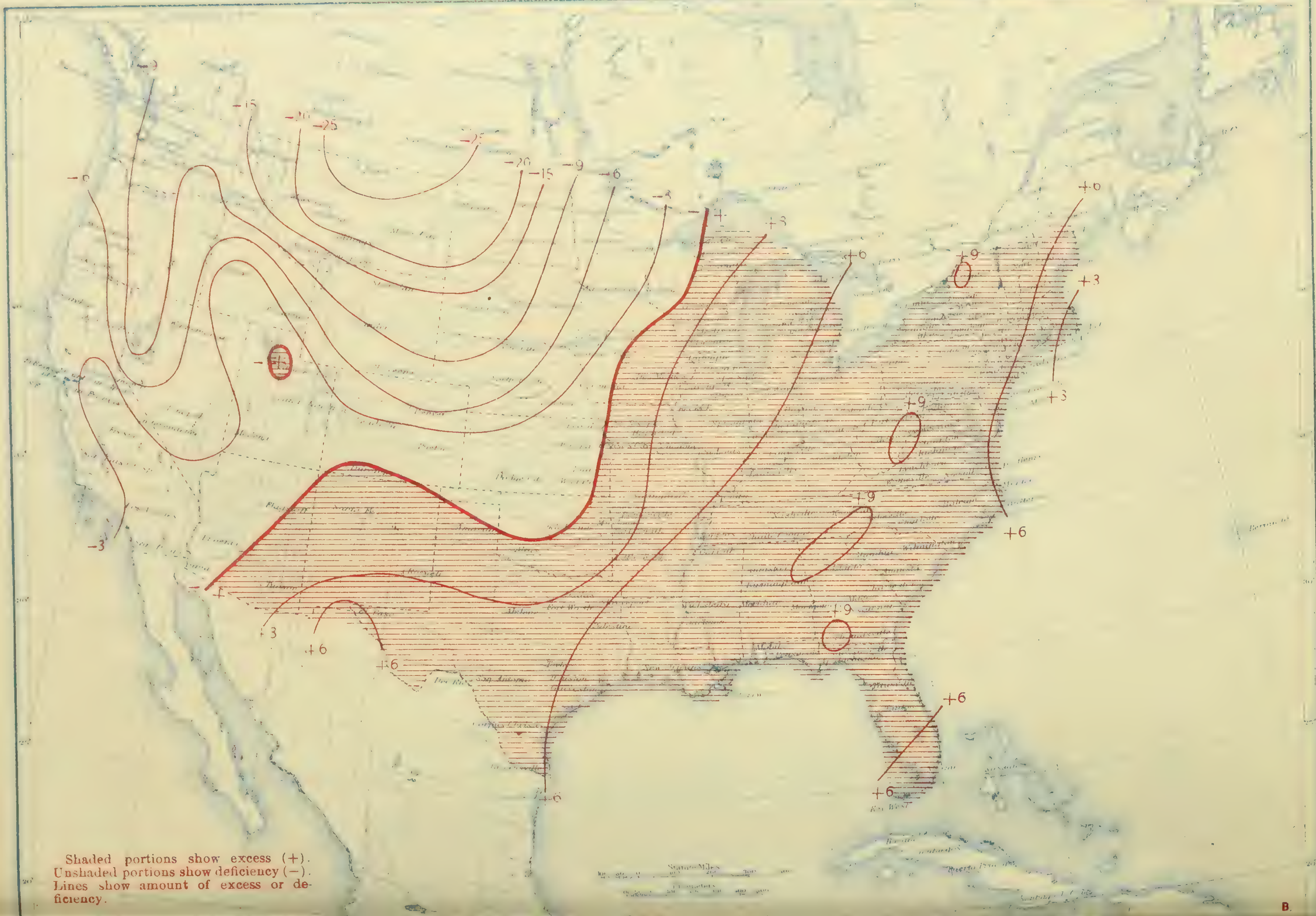
KENTUCKY SECTION

JANUARY, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 19, 1916

Departure of the Mean Temperature from the Normal, January, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

B.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXI. LOUISVILLE, KY., JANUARY, 1916. No. 1

GENERAL SUMMARY.

Some of the noteworthy features of weather conditions during January were the large number of warm days, the sudden changes in temperature, the thunderstorms and the heavy precipitation. Unseasonably mild weather prevailed during the first five days, from the 10th to 12th, and during the last decade, with maximum temperatures generally above 60 and on several days above 70°. Daily departures from the normal temperature were pronounced in either direction, ranging between 10° and 31° above normal during the warm periods and 6° to 27° below normal during the cold intervals. Typical warm weather thunderstorms, accompanied by hail in many places, occurred generally over the State on the 12th, followed by an abrupt fall in temperature of 60° or more in 18 to 24 hours and registering zero or lower by the 17th. The cold weather continued for a week and on the 20th the temperature rose from near zero to 60° almost as abruptly as it had fallen on the 12th, and mild weather prevailed during the remainder of the month. Thunderstorms attended by heavy rainfall, and hail in some places, also occurred on the 29th in the central and western counties.

The average precipitation for the State has been exceeded only three times in January during the past 28 years, viz., in 1898, 1907 and 1913. The heavy and almost continuous rains, falling on the saturated soil and with streams already bank full, caused serious floods along the lower Ohio, the lower Green and the Mississippi rivers. Conditions were at their worst at the end of the month, when a considerable number of people were homeless and dependent on charity, especially in the vicinity of Rumsey and Hickman.

PRESSURE.

The month was one of remarkable activity in pressure formations and movement. Nine distinct and well defined low pressure formations and five high areas passed over or near the Ohio Valley during the month, influencing current weather and temperature conditions over the State. The periods of the passage of these low and high pressure formations were as follows: "Lows", nearly all of which were attended by more or less heavy precipitation, 1st-2d; 5th; 10th; 12-13th; 15th; 22d; 25-26th; 27th and 29th-31st. "Highs", 2-3d; 6-9th; 13-14th; 16-18th, and 23d. The month closed with another high of marked energy sweeping in from the northwest.

The mean sea-level pressure for the State, based on the records of two stations, was 30.24 inches. The extremes in pressure were 30.64 inches at Lexington on the 8th and Louisville on the 14th, and 29.58 inches at Louisville on the 12th.

TEMPERATURE.

The mean temperature for the State, based on the records of 36 stations, was 41.2°, which is 5.8° above the January normal. The monthly extremes were 78° at Edmonton on the 30th, and −5° at Mt. Sterling on the 17th and Williamstown on the 18th. While these temperatures are not unusual for January, the suddenness of the transition from high to low and low to high temperatures was remarkable, even for mid-winter.

PRECIPITATION.

The average precipitation for the State, as determined from the records of 47 stations, was 7.27 inches, which is 3.05 inches in excess of the normal amount for January. The monthly amounts at the various stations ranged between 10.02 inches at Blandville, Ballard County, and 4.26 inches at Weeksbury, Floyd County, there being a gradual decrease in the amount received from west to east over the State. In the western counties, and also in Mason county, monthly amounts ranged between 8 and 10 inches. From 6 to 8 inches occurred over the central tier of counties, and 4 to 6 inches over the eastern mountain district. The total snowfall for the month averaged 3.7 inches, and occurred mostly on the 7th. The principal periods with precipitation were: 1st-2d; 6-7th; 10-13th; 22d, and 27th-31st.

WIND.

The total wind movement at Louisville was 11355 miles, and at Lexington 12760 miles, with average hourly velocities of 15.3 and 17.2 miles, respectively. These wind movements are among the highest on record for any month at these stations. The maximum velocity for five minutes at Louisville was at the rate of 52 miles per hour from the south on the 12th, and at Lexington 52 miles per hour from the southwest on the 5th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 81 per cent and at 7 p. m. 70 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 38 and at Lexington 31.

MISCELLANEOUS.

January 6.—An ice storm caused much damage to telegraph lines and trees in the western part of the State. One telegraph company had 27 miles of poles thrown down by the ice in the vicinity of Bowling Green.

January 12.—A brilliant meteor was observed generally by persons in the central and eastern counties. It is thus described

(Continued on next page.)

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	38.0	+2.6	65	13	3.52	0.70	..
1890	44.0	8.6	77	10	6.43	+2.21	
1891	37.0	1.6	68	14	5.40	+1.18	
1892	29.0	−6.4	65	− 6	2.72	−1.50	
1893	26.0	−9.4	67	−22	2.08	−2.14	
1894	38.0	+2.6	78	−12	2.91	−1.31	
1895	30.0	−5.4	78	16	5.71	1.49	11
1896	36.1	+0.7	74	− 3	1.25	−2.97	6
1897	32.0	−3.4	75	−16	3.25	−0.97	8
1898	40.4	+5.0	72	6	8.76	+4.54	12
1899	34.4	−1.0	68	−18	6.23	−2.01	11
1900	37.2	1.8	77	8	2.80	−1.42	8
1901	36.7	+1.3	75	4	1.85	−2.37	7
1902	33.7	1.7	70	5	5.14	+0.92	7
1903	34.8	−0.6	82	9	2.50	−1.72	9
1904	32.3	−3.1	70	9	3.17	−1.05	10
1905	27.5	−7.9	70	15	2.83	−1.39	11
1906	39.7	+4.3	80	− 9	3.48	−0.74	8
1907	43.2	+7.8	83	−11	8.02	3.80	11
1908	35.0	−0.4	62	7	2.20	−2.02	8
1909	38.3	+2.9	77	8	3.47	−0.75	9
1910	33.8	1.6	70	−20	4.41	0.19	10
1911	39.7	+4.3	73	−16	2.88	−1.34	11
1912	25.9	−9.5	61	−20	3.09	−1.13	8
1913	42.5	+7.1	76	13	11.41	+7.19	14
1914	39.4	+4.0	79	5	2.31	−1.91	6
1915	33.0	−2.4	65	0	5.03	+0.80	13
1916	41.2	+5.8	78	− 5	7.27	+3.05	14

Climatological data for January, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.						Greatest daily range.	Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.		Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	11	41.2	+ 6.4	72	12	3	17	37	8.51	+4.07	1.36	1.0	12	9	4	18	s	W. T. Austin.
Blandville	Ballard	445	33	40.6	+ 7.2	69	12	5	14†	42	10.02	+5.61	2.81	0.6	15	6	7	18	SE	E. W. Horr.
Calhoun	McLean	437	11	a43.0	+ 6.1	72	12	2	16a	41a	8.32	+3.42	1.50	T.	14	11a	3a	16a	SW	W. A. Taylor.
Earlington	Hopkins	420	24	39.6	+ 4.0	76	30	2	16	47	7.28	+3.15	1.12	0.5	12	11	0	20	s	Brick Southworth.
Hopkinsville	Christian	524	18	43.4	+ 5.4	73	12	1	17	57	9.82	+4.69	2.00	2.5	15	9	1	21	E	W. F. Randle.
Marion	Crittenden	571	17								77.5	+2.95								B. C. Paris.
Owensboro	Daviess	479	17	39.8	+ 4.3	71	11	6	14	58	9.26	+4.75	2.35	2.0	14	9	5	17	s	Henry S. Berry.
Paducah	McCracken	341	26								9.83	+5.57	2.69		13					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	21	47.4	+ 7.1	70	29	2	19	41	7.16	+2.31	1.34	4.0	12	10	4	17	s	W. W. Hicks.
Anchorage	Jefferson	700	13	39.0	+ 5.4	71	12†	−1	17	35	8.32	+4.66	2.00	4.7	16	12	5	14	sw	C. E. Barret.
Bardstown	Nelson	637	17	41.0	+ 5.1	73	12	−4	17	37	6.63	+1.80	1.48	6.2	14	9	7	15	s	Chas. M. Talbott.
Bowling Green	Warren	500	25	40.8	+ 3.8	73	12	−1	17†	47	8.86	+4.35	1.63	3.2	11	13	11	7	N	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	23								6.52	+2.77	1.06	2.0	12					C. L. Hurt.
Cloverport	Breckenridge	375	1								10.01	......	2.13	3.3	14					W. A. Cockerill.
Edmonton	Metcalfe	600	23	44.2	+ 8.3	78	30	−2	18†	52	8.20	+4.15	1.32	2.0	11	7	3	21	s	Miss Lee Ray.
Eubank	Pulaski	1177	20	43.2	+ 8.3	72	21	0	17†	60	5.69	+1.72	1.10	0.2	9	5	5	21	N	Mrs. Katie Payne.
Frankfort	Franklin	560	23	42.7	+ 6.5	76	12	−2	17	69	6.34	+2.72	1.33	7.0	15	5	7	19	s	Mrs. Amelia Wood
Franklin	Simpson	691	20	43.2	+ 5.6	72	12	4	17	32	9.48	+5.88	2.05	1.0	13	3	13	15	s	J. E. Newman.
Greensburg	Green	581	22	40.2	+ 6.0	73	12	−1	17†	60	6.46	+2.43	1.15	1.0	14	2	18	11	NE	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	12								6.39	+3.07	1.31	6.5	13					Miss Lulu Wood.
Irvington	Breckenridge	646	17	41.3	+ 5.9	72	12	0	17	37	8.51	+4.82	2.51	2.0	11	10	5	16	sw	W. J. Piggott.
Leitchfield	Grayson	635	19	41.2	+ 6.1	71	12	−1	17	41	7.11	+2.59	1.17	1.0	13	9	5	17	s	John E. Stone.
Lexington	Fayette	989	30	39.6	+ 6.6	69	30	−4	17	34	5.65	+1.82	0.95	8.7	18	7	7	17	s	U. S. Weather Bureau.
Loretto‡‡	Marion	681	16	41.3	+ 5.1	72	30	−4	17	35	7.68	+3.59	1.08	2.5	17	2	11	18	......	Loretto Academy.
LOUISVILLE	Jefferson	525	42	40.0	+ 5.7	72	12	0	17	52	8.16	+4.26	2.31	4.7	17	6	10	15	s	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	530	5	40.4	......	72	12	−1	17	49	8.80	......	2.70	4.0	16	9	8	14	sw	Wm. I. Hunt.
St John	Hardin	777	18	38.8	+ 4.7	70	12†	−3	17	55	6.18	+1.61	1.34	1.7	13	11	2	18	......	Sisters of Loretto.
Scott	Kenton	900	17	38.8	+ 6.7	69	12†	−3	17	45	7.30	+3.82	1.31	4.6	16	7	6	18	s	E. B. Wilson.
Shelby City	Boyle	1087	20	42.6	+ 8.0	70	12†	−4	17	39	7.90	+3.48	1.30	1.5	12	11	6	14	s	H. F. Ewing.
Shelbyville	Shelby	825	25	37.7	+ 4.0	72	12	−3	17	50	7.41	+3.44	1.96	5.9	18	10	3	18	s	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	12	39.8	+ 6.0	72	12	−3	8†	45	8.02	+4.35	2.30	6.3	16	8	4	19	sw	E. D. Bourne.
Williamstown	Grant	943	12	38.0	+ 6.4	70	21†	−5	18	43	6.42	+3.33	2.00	6.0	14	9	7	15	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	10	40.3	+ 5.8	76	21	−1	18	53	5.09	+1.08	0.90	2.2	12	10	11	10	w	Mrs. Sabina E. Hall.
Berea	Madison	1070	13	42.0	+ 4.7	70	22	−2	17	52	8.20	+3.67	1.96	5.5	13	17	0	14	sw	C. F. Rumold.
Catlettsburg	Boyd	534	26								5.39	+1.46	0.88	7.0	15					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	25								7.44	+4.17	2.02	4.0	18	10	4	17	......	J. V. Oldham.
Farmers	Rowan	668	8	42.8	+ 7.5	73	21†	0	17	48	6.99	+3.19	1.30	......	14	11	3	17	w	Mrs. Lurlene Triplett.
Hazard	Perry	......	1																	
Jackson	Breathitt	776	4																	
London	Laurel	1190	0								6.14	......	1.00	2.5	13					C. R. Lee.
Louisa	Lawrence	584	10								4.47	+1.28	1.00	7.5	12					G. M. Guerin.
Manchester	Clay	1400	3								6.26	......	1.93	4.0	9					Mrs. Geo. P. Hatton.
Maysville	Mason	524	17	37.6	+ 5.3	73	21	−3	17†	49	8.47	+4.52	2.35	5.0	17	12	6	13	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	19	45.2	+ 7.4	72	26	3	18	38	6.27	+2.27	1.71	......	13	13	10	8	......	B. H. Perkins.
Mount Sterling	Montgomery	930	24	37.6	+ 3.8	70	26†	−5	17	45	5.91	+1.53	1.23	10.0	13	9	3	19	NW	W. R. McKee.
Pikeville	Pike	634	8								4.30	+0.51	1.12	2.0	12					I. M. Williams.
Richmond	Madison	926	22	42.2	+ 8.5	71	21	−1	17	30	5.91	+1.84	1.00	6.1	15	12	4	15	......	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	1	41.4	......	68	12	3	18	37	4.26	......	0.80	4.0	10	20	2	9	......	O. A. Lund.
Williamsburg	Whitley	939	18	44.2	+ 6.3	72	12	2	19†	58	6.76	+2.73	1.52	3.0	13	10	7	14	s	N. C. Jones.
State averages and extremes				41.2	......	78	30	−5	17†	69	7.27	......	2.81	3.7	14	9	6	16	s	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are usec n determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

by Mr. John E. Stone, cooperative observer at Leitchfield, Ky.

"Near 5:50 a m. a very large meteor appeared about north 70 east and about 30 above the horizon, circling upward, then downward, somewhat in a rainbow shape, toward the north, apparently exploding about north 10° east and near 15° above the horizon. It made the elements light as day, casting off balls or sparks of fire, and left a livid stream of rainbow tinted light, about three or four degrees long and about as wide as the diameter of the full moon, and remaining some seconds."

January 27.—A wind storm caused damage amounting to approximately $10,000 in Louisville. Roofs were torn off, walls thrown down and smokestacks demolished in the east-central section of the city.

Rivers.—The month opened with the Ohio River at flood stage in the Evansville section, and by the 3d flood stages had been reached at Cincinnati and Cloverport. A slight decline set in on the 4th, continuing for several days, but did not exten to Paducah where flood conditions still prevailed. The heav rains of the 12th caused a rapid rise in all the streams of th State and severe flood conditions in the lower Green Rive Also flood stage was again reached in the Ohio at Cloverport o the 12th, and from the mouth of the Licking to Louisville b the 14th; the Ohio continuing in flood until the 16th at Cincin nati, the 18th at Louisville and 21st at Cloverport. By th 27th the decline had reached Evansville and Paducah, but th rains of the 30th-31st caused another general rise and the mont closed with flood stages again prevailing in the section fro Evansville to Cairo and high stages throughout that portion o the Ohio bordering on this State.

ERRATA.

December, 1915. High Bridge: Total precipitation should be 6.74 inches.

Daily Precipitation for January, 1916.

Stations	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam‖ G.	.96	.30				.90	T.				1.10	.07	1.28			T.	.03					.90					T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Blandville M.	1.85	.04			.10	.45	.24		T.	.07	.77	.39				T			T.	.05	.77					T	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Calhoun G.	.68	.32			.12	.05	.48			T.	.71	.81	T	T		T		.05		T	.97						.12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Earlington‡‖ G.	.78	.12				.79					1.12	.10	.42				.30					1.03					.29	1.10	.19		1.04	[illegible]
Hopkinsville C.	.83	.25			.10	.30	2.00			.08	1.18	1.30				.25					.30	1.00				.30		.58	.25		1.10	9.82
Marion O.																																
Owensboro‖ O.	.31				.20		.20	.08		.40	1.18	.90				T					.30	.48					.38	1.20	2.35	[illegible]	1.20	9.26
Paducah‡‖ O.	1.30	.75				T	.75			T	.46	.18	.36								.03	.70					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Central Division.																																
Alpha C.	.60	.45			.53	1.34	.10			.60	1.05	T		T		.40	T.	T	T		1.25	.10						.51	[illegible]	.20		[illegible]
Anchorage O.	.48	.04			.26	T.	.40			.22	1.22	.75	T.			.03	T.		T	.10		.78				T	.34	.35	2.00	.27	1.08	8.32
Bardstown‖ S.	.35	.32				.12	.32				.45	.70	.78			.02	.28					.84					[illegible]	[illegible]	.10		[illegible]	[illegible]
Bowling Green‖ G.	1.00	1.25						1.63			1.00		1.05	T.		.03	.25					1.00						.40	.50		[illegible]	[illegible]
Burnside‖ C.	.46	.46				.55	1.06				.82	.23	.88			.25	.18					1.05						.08	.50			6.52
Cloverport‡ O.	.23	.30				.68	.51				.54	.56	1.06	T.		.03	.02			.02		1.04					T	[illegible]	[illegible]	1.65	.81	10.61
Edmonton G.	1.32	.39				.45	1.15			T.	.89		1.14	T.		.20						1.11					.12	.40		T	1.03	8.20
Eubank‖ C.						.30	1.00				.65	1.05	1.10			.20	.17					.72							.50			5.69
Frankfort‖ K.	.13	.25			T.	.46	.45			T	.38	.49	.86	T.		T	.06			.09		.56					.02	.25	.78	1.33	.23	6.34
Franklin G.	1.50	.28			.44	T.	1.24			T.	1.03	1.04	T.			.12					.04	1.09				T	.31	.32	.02		2.05	9.48
Greensburg‖ G.	.53	.39				.46	.69				.51	.65	1.15			.12	.10					.73					.03	.12	.64		.34	6.46
High Bridge‖ K.	.25	.46				.22	.50				.36	.79	1.26			.10	.15					.60							1.31	.12	.27	6.39
Irvington O.	.68				.22		.62			.18	.92	1.02	T		T.	T.			T.			.98					.32	.56	2.51	T.	.50	8.51
Leitchfield G.	.91				.05	.50				*	.94	1.02	T			.10					*	.94				T.	.43	.91	.14		1.17	7.11
Lexington *** K.	.42				.13	.29	.46			.13	.81	.72	.01	T.		.18			.01	.05	.23	.19			T.	T	.06	.33	.80	.02	.81	5.65
Loretto S.	.26	.06	.01	T.	.12		.02	.71		.04	1.08	.94	T.			.10						.61		.01			.35	.98	.37	1.03	.99	7.68
Louisville*** O.	.46				.13	.17	.25		T.	.33	1.31	.66	T			.02			T	.07	.65	.09				.03	.34	.59	2.13	.08	.85	8.16
Do. (Cherokee Park) O.	.38	.16				.25	.35			.04	1.77		.71			.01				.26	.05	.80				.02	.36	.04		2.70	.90	8.80
St. John‖ S.	.47	.67				.18	.28			T.	.62	.46	1.15			T.						.08				T.	.08	.37	1.34	.08	.40	6.18
Scott L.	.22	.18		T.	.15		.44			.11	1.31	1.06	.45	T.		.02				.38		.35					.20	.07	.91	.77	.68	7.30
Shelby City K.	.77	.12				.45	.45			.60	1.30		1.21			.10						.98						.30	.78		.84	7.90
Shelbyville‖ S.	.10	.24			.07	.32	.44			.02	.43	.67	.90	T.			.15			.10		.60	.02				.05	.32	.64	1.96	.38	7.41
Taylorsville S.	.29	.19			.23	.11	.60			.10	.82	.30	.13	T.		.12				.09							.41	.46	2.30	.85	1.02	8.02
Williamstown L.		.16				.13	.30			T.	.54	2.00	.63			.37				.10	.11	.26				T.		.07	.29	1.23	.23	6.42
Eastern Division.																																
Beattyville‖ K.	.69	.14				.55	.90	T.			.17	.46	.90	.01		.15	.11			T.	T.	.40	T.					T.	.61			5.09
Berea K.	.70	.10				.62	.24			.03	1.96		1.30	.06		.30	.09											1.70	.23		.87	8.20
Catlettsburg‖ B.	.08	.32				.32	.58				.34	.82	.88	T.		.14	.16			.24		.20					.08	.06	.44	.70		5.36
Falmouth‖ L.	.02	.36			.04	.30	.32			.01	.70	2.02	.87	T.			.03			.25	.08	.29					.01	.09	.26	1.48	.31	7.44
Farmers L.	.60	.12					.70			.05	1.30		1.00			.03	.05	.03	.03		.58								1.00	.50	1.00	6.99
Hazard K.																																
Jackson‖ K.																																
London‖ C.	.40	.60			.02	.05	.80				.60	.45	1.00			.24	.35					.65	.48						.50			6.14
Louisa B.	.20	.19				.32	.75				.24	.55	1.00				.19			.22		.15							.26	.40		4.47
Manchester‖ K.		.61				.04					.86	.27	1.93				.40					1.21	.32						.62			6.26
Maysville‖ O.	.01	.34			.02	.55	.42			T.	.38	2.35	1.44	T.		T.	.05			.18	.04	.45	.05				T	.05	.36	1.75	.03	8.47
Middlesboro C.	.56	.23				.40	1.71				.17	.16	.90			.33	.40					1.15				.05			.14		.07	6.27
Mount Sterling‖ L.	.33	.32				.38	.39			.03	.30	.45	1.23			.07	.16			T.		.70					T.		.75	.80		5.91
Pikeville‖ B.	.32	.22				.42	.86	T.			.16	1.12		T.	T.	.12	.22					.36					T	.16	.22	.12		4.30
Richmond‡‖ K.	.50	.20				.56	.66				.64	.51	.76	.03			.12					.62	.03			.03		.07	1.00	.18	T	5.91
Weeksbury B.	.50					.46	.80				.48		.42			.40						.45						.05	.10		.60	4.26
Williamsburg‖ C.	.78	.58				.42	1.52	.02			.17		1.44	T.		.10	.34					.89	.25				.05	T.	.20			6.76

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

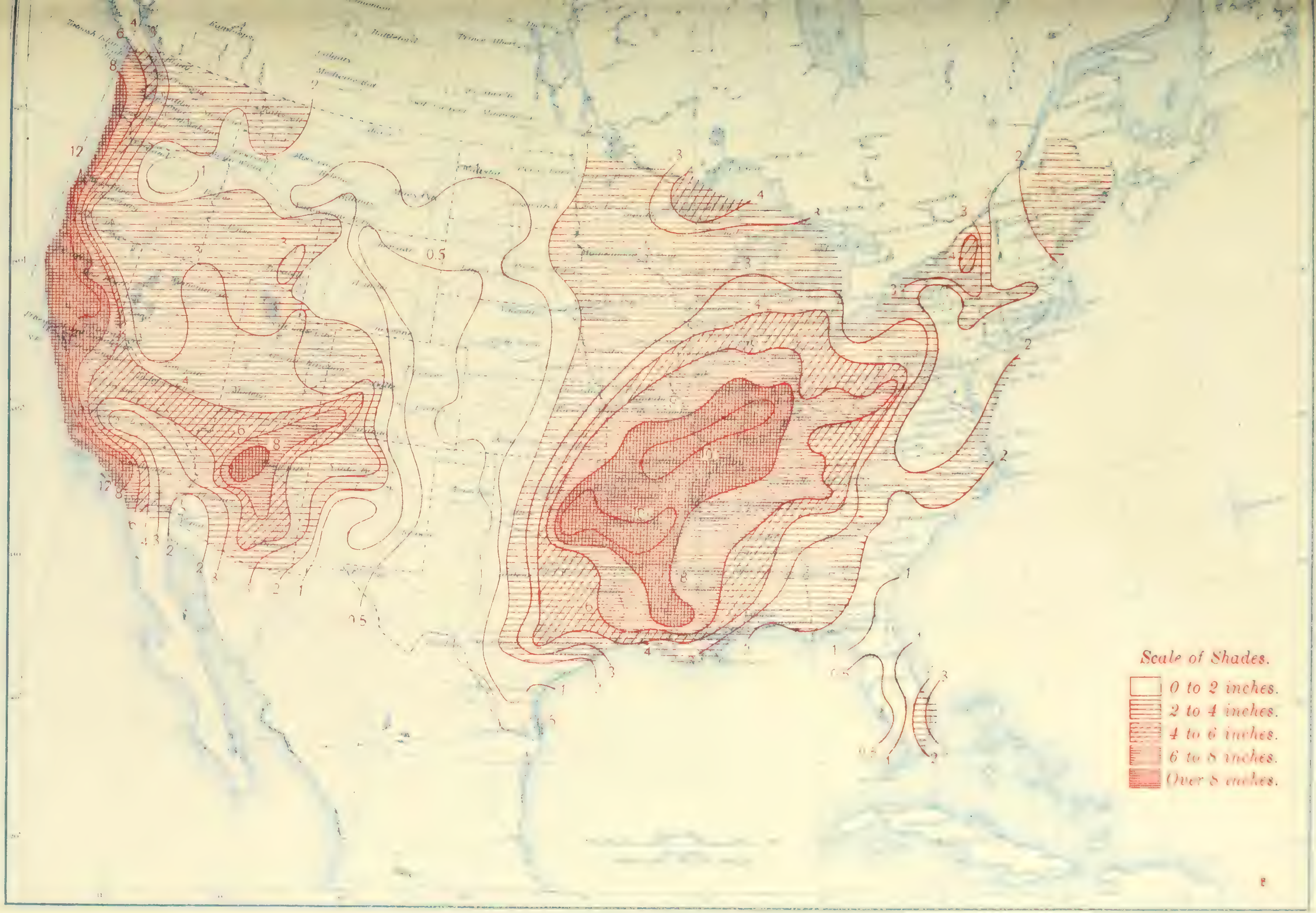
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for January, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	65	50	53	62	61	32	32	40	49	55	65	72	15	24	37	27	17	29	42	57	66	56	57	62	63	67	68	58	68	71	45	50.5
	Minimum	33	40	27	25	45	21	25	20	21	32	40	40	10	7	16	25	3	12	6	30	47	50	27	31	44	49	60	44	49	62	45	31.8
Blandville	Maximum	68	63	50	58	61	33	31	38	45	57	66	69	27	21	35	34	20	29	35	51	57	53	57	59	59	66	65	55	64	68	61	50.2
	Minimum	47	37	29	34	33	22	25	21	30	43	39	27	7	5	16	13	5	14	16	35	48	42	33	36	47	51	55	35	42	43	31	31.0
Calhoun	Maximum	63	69	54	60	63	37	38	40	50	55	55	72	47	24	..	38	26	34	49	56	60	54	56	61	62	67	69	59	65	71	69	[a]54.1
	Minimum	47	36	29	34	36	19	20	32	34	47	38	40	12	6	..	2	10	12	15	15	45	45	30	36	45	51	56	40	40	50	36	[a]31.9
Earlington §§	Maximum	65	47	52	61	61	30	31	42	52	56	66	74	15	24	39	15	20	30	44	59	62	53	60	65	64	69	69	60	68	76	43	50.7
	Minimum	34	38	26	25	37	21	21	19	23	35	37	40	8	6	7	2	5	4	7	12	43	47	26	30	44	46	55	41	41	60	42	28.5
Hopkinsville	Maximum	66	65	49	63	60	59	45	38	47	55	67	73	65	25	38	39	25	28	33	55	64	57	56	63	62	67	62	58	70	72	67	54.6
	Minimum	48	43	29	24	52	23	21	32	27	44	42	49	8	8	18	15	1	6	6	29	49	46	31	31	42	31	42	45	62	60	36	32.3
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro §§	Maximum	53	49	57	59	46	33	43	40	55	54	71	35	21	45	17	17	27	31	53	60	54	55	60	60	65	68	55	62	68	65	45	49.1
	Minimum	48	43	30	28	36	19	19	22	25	47	49	13	8	6	17	15	4	13	11	27	43	44	30	34	42	48	54	42	48	50	35	30.6
Central Division																																	
Alpha	Maximum	60	63	55	61	59	56	39	43	47	50	65	69	61	20	42	44	28	24	41	60	68	57	54	61	65	66	68	63	70	68	63	54.5
	Minimum	54	54	39	25	56	34	31	22	25	48	58	61	20	15	25	28	5	13	2	40	57	53	31	45	54	58	60	54	60	63	56	40.2
Anchorage	Maximum	62	64	47	57	57	35	32	37	42	51	46	71	40	22	34	36	13	23	30	57	71	63	52	61	62	65	70	64	60	71	65	50.3
	Minimum	46	33	25	24	35	18	8	2	13	41	38	40	10	6	13	11	-1	6	3	30	42	32	25	34	36	46	53	53	45	59	36	27.8
Bardstown §§	Maximum	62	53	41	60	58	30	33	41	49	54	64	73	17	26	38	30	14	28	42	60	72	52	54	63	63	71	58	68	68	72	57	50.7
	Minimum	35	47	21	26	40	22	22	9	17	43	39	45	14	10	17	26	4	4	5	30	41	52	27	31	40	45	51	50	53	58	57	31.4
Bowling Green§§	Maximum	63	57	51	61	60	51	48	42	48	55	68	73	16	25	39	34	15	26	46	51	71	54	57	62	65	68	69	70	70	68	60	53.0
	Minimum	40	40	27	40	34	21	21	22	15	30	40	45	12	5	10	19	-1	0	-1	17	42	49	28	29	39	48	49	48	45	35	35	28.5
Edmonton	Maximum	63	64	57	62	62	60	31	36	45	55	68	72	66	24	39	42	16	26	35	60	72	67	56	62	64	69	70	61	68	78	68	55.4
	Minimum	43	43	25	21	50	25	27	18	21	30	50	63	14	10	17	15	0	-2	-2	26	48	45	28	32	53	50	46	46	53	61	63	32.9
Eubank§§	Maximum	63	58	58	65	60	50	44	40	45	54	64	70	62	51	43	39	31	26	40	60	72	63	58	67	66	69	68	60	68	70	60	56.3
	Minimum	32	50	41	28	36	27	25	17	17	23	39	39	18	10	10	23	0	2	3	0	35	48	27	29	34	44	51	53	53	57	59	30.0
Frankfort	Maximum	64	63	53	63	64	62	35	39	44	53	58	76	73	24	40	43	26	26	32	57	72	74	59	64	66	66	74	64	64	75	74	56.4
	Minimum	44	43	28	23	50	21	19	3	12	40	38	40	4	9	17	17	-2	5	2	27	34	49	26	29	35	42	52	49	46	56	41	29.0
Franklin	Maximum	62	63	47	61	61	46	32	36	46	55	66	72	43	23	40	41	19	26	35	57	69	68	55	61	63	65	69	59	67	70	68	53.1
	Minimum	42	42	31	29	44	24	26	21	26	42	43	41	12	9	19	11	4	7	10	31	47	40	32	40	44	52	55	51	57	60	36	33.2
Greensburg§§	Maximum	65	56	50	63	62	32	30	38	49	57	68	73	18	24	41	32	16	26	41	60	72	54	56	63	67	69	70	60	69	72	57	51.9
	Minimum	29	52	27	23	24	25	24	17	18	25	40	41	16	12	12	23	-1	-1	-1	0	40	39	26	28	30	44	50	53	53	58	56	28.5
Irvington	Maximum	65	63	47	58	58	38	32	37	43	53	44	72	47	21	37	37	15	27	32	56	69	60	52	59	62	64	69	62	64	71	65	50.9
	Minimum	48	38	30	31	38	20	23	14	21	43	39	42	10	7	18	10	0	9	6	31	47	42	32	40	46	53	56	47	50	60	33	31.7
Leitchfield	Maximum	62	50	47	59	59	50	31	38	44	53	54	71	50	22	36	35	16	26	33	56	70	62	54	59	65	64	68	55	67	70	65	51.3
	Minimum	48	40	28	27	49	21	25	17	23	42	39	50	9	6	16	12	-1	2	1	29	43	42	29	33	42	50	50	48	48	60	32	31.0
Lexington	Maximum	62	62	43	58	59	30	27	34	42	52	53	68	34	19	38	38	9	21	35	57	69	54	50	59	58	66	67	56	65	69	60	48.8
	Minimum	47	33	30	31	30	21	20	15	22	39	37	34	11	7	16	6	-4	3	12	35	49	39	33	39	45	52	54	48	49	59	35	30.5
Loretto	Maximum	62	64	50	62	59	40	30	39	44	54	54	71	40	22	35	40	15	24	32	59	71	67	54	62	62	67	70	68	65	72	67	52.3
	Minimum	47	44	25	21	28	22	25	7	14	43	39	36	13	10	14	15	-4	3	-3	30	49	48	24	38	42	50	51	51	55	61	41	30.3
Louisville	Maximum	63	63	46	58	58	30	33	36	45	52	44	72	20	20	37	35	14	26	33	57	71	53	52	60	62	64	69	54	62	71	64	49.2
	Minimum	49	36	33	30	30	20	21	16	20	39	39	20	10	6	18	7	0	11	13	33	51	41	34	38	48	52	54	44	48	59	35	30.8
Do (Cherokee Park)	Maximum	60	63	44	56	57	49	31	34	41	52	52	72	58	20	35	37	17	26	30	55	69	68	51	60	62	64	70	58	60	71	67	51.3
	Minimum	41	38	30	24	46	17	22	8	13	39	37	39	9	6	15	14	-1	7	6	28	46	45	27	31	43	49	51	42	45	57	37	29.4
St John §§	Maximum	62	65	52	59	57	33	30	36	47	54	64	70	15	21	38	29	16	28	40	56	70	52	51	60	63	65	68	57	66	69	57	50.0
	Minimum	32	44	33	26	28	21	21	12	11	24	39	39	12	8	8	20	-3	-2	1	1	40	47	28	29	34	44	51	49	48	57	55	27.6
Scott	Maximum	56	63	43	56	56	45	31	35	39	48	48	69	56	20	31	34	13	26	27	51	68	63	51	59	60	62	68	67	52	69	64	49.4
	Minimum	42	39	27	22	45	16	21	8	14	37	35	36	11	7	12	13	-3	7	7	24	42	42	28	30	41	47	55	41	38	51	39	28.2
Shelby City	Maximum	59	63	47	61	59	55	35	36	45	57	62	70	43	34	48	41	19	29	33	60	70	65	52	62	64	68	69	65	67	70	67	54.0
	Minimum	46	46	28	22	28	30	25	9	15	35	46	43	25	11	15	19	-4	3	-1	30	40	50	28	29	38	41	56	54	52	61	45	31.3
Shelbyville §§	Maximum	62	49	47	58	56	30	31	38	47	52	62	72	15	23	35	29	15	25	37	56	71	53	53	63	64	66	69	53	62	71	56	49.0
	Minimum	35	43	25	25	34	19	20	4	8	21	37	38	12	7	7	20	-3	-2	3	6	36	45	26	27	34	44	49	47	45	52	54	26.4
Taylorsville	Maximum	61	63	44	59	58	48	31	35	42	52	45	72	57	21	35	36	16	24	31	55	70	64	50	59	61	65	70	56	63	69	66	50.9
	Minimum	45	41	25	23	48	21	24	-3	6	38	39	40	12	9	16	16	3	3	-2	30	40	44	24	28	35	46	53	49	49	57	40	28.8
Williamstown §§	Maximum	62	50	47	59	56	46	32	37	44	49	66	69	32	41	45	26	19	27	37	55	70	52	53	61	61	66	70	51	63	70	56	50.7
	Minimum	34	31	25	24	24	16	17	12	12	18	36	32	12	5	5	16	4	-5	6	12	34	49	30	30	35	43	48	46	41	46	54	25.3
Eastern Division																																	
Beattyville §§	Maximum	63	61	53	65	63	44	31	39	50	55	56	72	33	28	41	34	23	27	37	64	76	55	53	70	66	74	69	66	70	71	64	54.0
	Minimum	31	51	28	21	21	30	27	12	12	16	40	40	24	14	14	20	4	1	1	11	31	32	25	25	25	30	43	45	51	50	51	26.6
Berea	Maximum	62	61	46	52	56	56	44	38	44	51	63	68	68	20	39	39	17	24	31	54	65	70	60	57	57	63	63	62	63	65	65	52.4
	Minimum	41	45	28	22	46	25	23	11	11	20	39	52	16	11	12	15	-2	4	3	29	50	55	26	37	38	43	58	58	58	61	46	31.6
Farmers	Maximum	62	65	68	62	61	58	33	38	37	63	55	54	68	23	33	39	20	25	34	60	73	69	52	65	65	73	72	62	62	73	72	54.7
	Minimum	42	50	27	18	19	28	25	32	34	31	39	40	20	13	12	18	0	5	20	29	36	51	24	26	28	38	48	52	47	53	50	30.8
Maysville§§	Maximum	64	55	46	62	58	32	37	38	47	55	42	70	21	24	36	34	16	28	34	55	73	55	56	65	58	72	70	56	63	72	60	50.1
	Minimum	34	46	29	20	21	22	21	10	12	16	35	37	19	10	10	16	-3	3	4	6	34	44	24	26	26	27	39	51	43	43	58	25.1
Middlesboro	Maximum	60	65	56	56	58	59	39	49	45	60	65	66	66	31	40	41	30	27	38	54	70	66	58	61	70	72	68	69	68	68	65	56.1
	Minimum	45	56	30	22	41	31	33	29	24	40	40	58	28	14	18	30	7	3	4	27	32	53	29	28	32	40	47	50	55	59	57	34.3
Mount Sterling§§	Maximum	61	51	41	56	60	30	31	33	46	51	62	67	20	20	38	30	8	21	36	54	68	53	48	59	58	70	70	60	65	70	59	48.3
	Minimum	36	49	27	22	26	23	23	1	2	17	38	38	18	10	13	20	-5	-3	0	9	36	42	26	30	30	42	52	54	48	50	58	26.8
Richmond §§	Maximum	62	56	51	60	61	51	29	35	46	52	63	69	38	25	39	30	11	22	35	58	71	53	53	62	61	70	69	58	66	69	58	51.1
	Minimum	42	49	28	28	48	24	24	12	19	36	40	48	18	12	18	25	-1	3	9	30	41	53	30	34	42	49	53	54	52	58	58	33.4
Weeksbury	Maximum	50	53	53	44	62	62	36	30	38	54	60	68	64	27	35	46	40	20	32	54	58	58	51	44	56	58	65	65	61	61	51	50.2
	Minimum	37	44	30	24	39	30	28	21	23	32	43	55	27	14	17	20	4	3	6	29	37	51	30	31	33	45	53	55	53	50	50	32.7
Williamsburg §§	Maximum	63	60	59	60	63	43	45	46	50	61	70	72	62	48	50	45	40	19	40	60	71	56	50	62	67	71	70	67	69	70	57	57.0
	Minimum	33	29	27	24	29	31	33	28	23	34	48	53	26	14	14	28	7	3	2	2	40	47	39	28	34	38	52	52	51	48	50	31.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

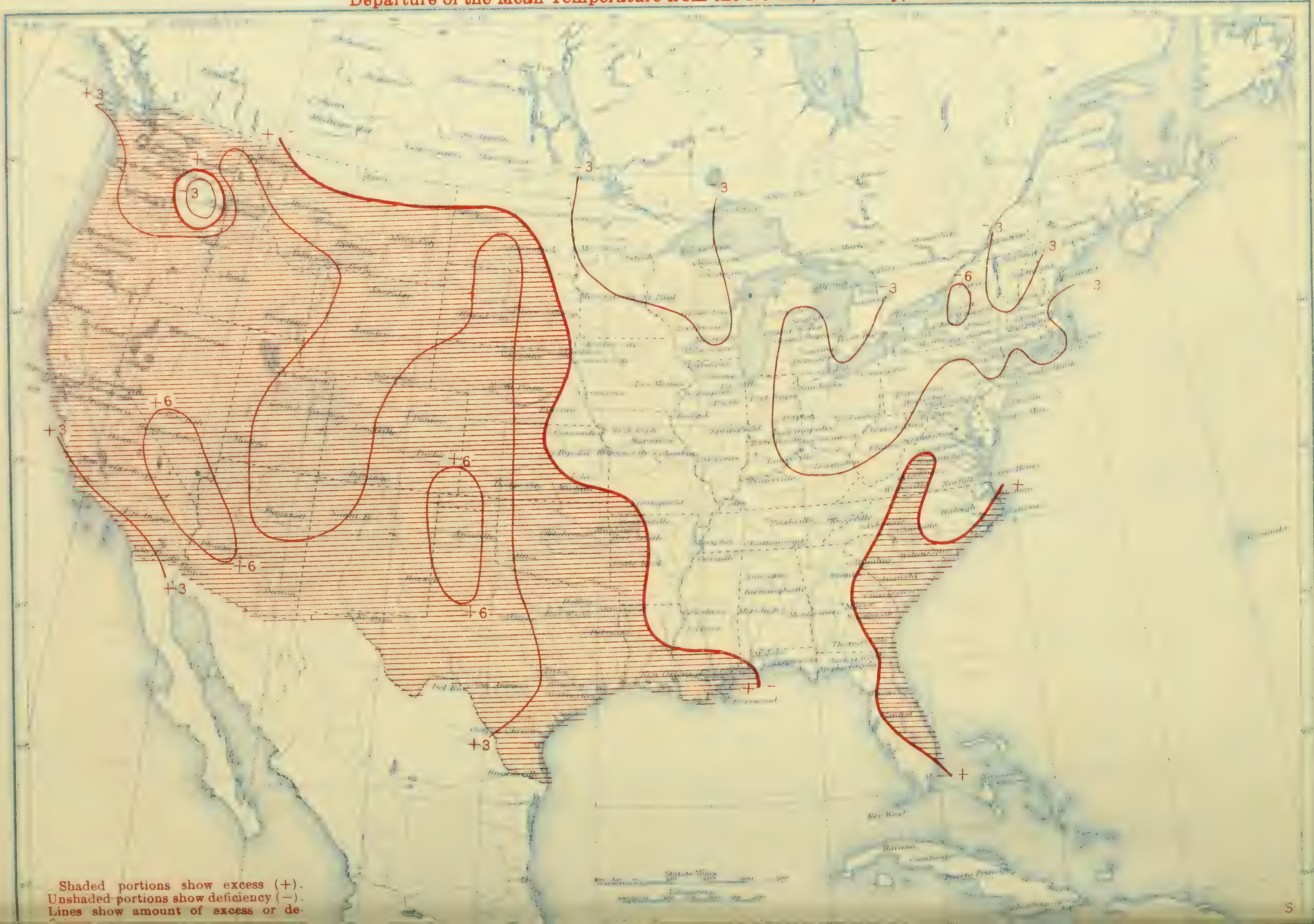
KENTUCKY SECTION

FEBRUARY, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 21, 1916

Departure of the Mean Temperature from the Normal, February, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXI. Louisville, Ky., February, 1916. No. 2

GENERAL SUMMARY.

The temperature for the month as a whole averaged near ormal, with no marked extremes in either direction. The only emperatures that could be called severe occurred in the central nd eastern counties on the 14th and 15th, when they ranged etween 4° below and 9° above zero at most stations. Zero emperatures were recorded at only a few stations, all in the northeastern counties. A period of mild temperature and exceptionlly favorable weather for outdoor work prevailed from the 17th o 22d, inclusive, with springlike conditions from the 20th to 2d. Buds on peach trees were beginning to open and some pring plants had made their appearance by the 22d.

Precipitation averaged considerably below normal, the deficiency being greatest in the extreme western counties. A few tations in the northeastern counties reported amounts slightly n excess of normal, but at many stations the total precipitation vas only about one-half the normal amount for February. nowfall was light except at a few mountain stations. Snow emained on the ground only a few days at any time, and winter heat suffered on account of lack of covering.

Flood conditions along the lower Green, the lower Ohio and Iississippi, prevailing at the end of January, grew worse during he first few days of February. The number of persons made omeless in that district, but mainly at Hickman, was estimated t more than 2000. The cold nights of the first week occasioned much suffering among the flood refugees. In the icinity of Hickman the water had not subsided sufficiently for ormal activities to be resumed until near the end of the ionth.

PRESSURE.

High pressure areas very largely dominated weather conditions over this section during the month. In fact only two low ressure disturbances of consequence passed over or near the tate during the entire month causing a stress of weather. The he first of these was the disturbance which appeared on the entral Pacific coast on the 20th, moved almost due eastward to he lower Ohio Valley by the 23d, thence to the Carolina coast he 24th and to the north Atlantic by the 26th. The second ppeared on the south Pacific coast the 26th, and moved to the ower Mississippi by the 28th and to the South Atlantic coast y the morning of the 29th.

The mean sea-level pressure, based on the records of two ations, was 30.18 inches. The extremes in pressure were 0.78 inches on the 14th at Louisville, and 29.64 inches at Lexington on the 26th.

TEMPERATURE.

The mean temperature for the State, based on the records of 5 stations, was 34.9°, which is 0.5° below normal for February, and 6° below the average temperature for January preceding. The mouthly extremes were 72° at Earlington and Loretto n the 22d, and −4° at Maysville on the 14th.

PRECIPITATION.

The average precipitation for the State, computed from the cords of 46 stations, was 2.99 inches, which is 0.75 inch less an normal for February. Amounts at the various stations nged between 1.23 inches at Paducah and 4.90 inches at Catlettsburg. Over the western counties amounts were generally ss than 2.0 inches, while over the rest of the State they ranged tween 2.0 and 4.0 inches, except at a few stations in the central and northeastern counties where they were slightly in excess of 4.0 inches. The total snowfall for the month averaged 5.0 inches, ranging from 1.0 inch at Owensboro and Irvington to 15.6 inches at Weeksbury, Floyd County. The snow occurred mostly on the 13th and 28th, although there were several other days with considerable snowfall in the mountain counties. Precipitation was fairly general in the following periods: 1st-2d; 6th; 9th; 12-13th; 23d-29th, but the 24-hour amounts were usually not large.

WIND.

The total wind movement at Louisville was 9498 miles, and at Lexington 9865 miles, with average hourly velocities of 13.6 and 14.2 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 48 miles per hour and at Lexington 44 miles per hour, from the northwest on the 26th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent and at 7 p. m. 65 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 49 and at Lexington 31.

MISCELLANEOUS.

A slight earthquake shock was felt in the southern mountain region of eastern Kentucky about 5:50 p. m., February 21st. Some articles of furniture were moved about, but no damage was reported.

Rivers.—Stages in the lower Ohio, which were at flood heights in the Evansville-Cairo reach at the close of January, continued to increase for several days. By February 2d flood stages had been reached at all points from Cloverport to Cairo. The water subsided very slowly, remaining above flood stage at Cairo until the 16th. In the upper reaches of the Ohio, and all other streams of the State, good stages prevailed during the month.

ERRATA

December, 1915: Burnside total precipitation should be 7.89 inches.

January, 1916: Lexington minimum temperature on 11th should be 38, mean minimum temperature for month 30.6, and mean temperature for the month 39.7.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	34.1	−1.3	74	3	1.91	−1.83	..
1890	45.6	+10.2	86	16	7.98	+4.24	.
1891	42.2	+6.8	76	0	4.72	+0.98	
1892	42.2	+6.8	70	11	2.92	−0.82	
1893	37.7	+2.3	70	3	4.40	+0.66	..
1894	34.6	−0.8	74	2	1.66	+0.92	.
1895	25.9	−9.5	80	−18	0.66	−3.08	5
1896	37.4	+2.0	81	−12	3.06	−0.68	9
1897	39.8	+4.4	76	8	5.75	+2.01	11
1898	37.4	+2.0	77	− 3	1.61	−2.13	6
1899	26.2	−9.2	71	−33	3.97	+0.23	11
1900	32.5	−2.9	76	− 9	4.68	+0.94	12
1901	32.4	−3.0	71	1	1.27	−2.47	6
1902	27.9	−7.5	69	− 3	1.30	−2.44	7
1903	37.5	+2.1	75	−16	7.28	+3.54	9
1904	35.2	−0.2	75	− 2	2.32	−1.42	7
1905	27.9	−7.5	67	−16	2.14	−1.30	9
1906	34.7	−0.7	75	−12	1.81	−1.93	7
1907	35.7	+0.3	73	−10	3.06	−0.68	9
1908	35.6	+0.2	70	2	5.56	+1.82	13
1909	42.4	+7.0	75	− 8	8.17	+4.43	11
1910	32.9	−2.5	66	−12	4.70	+0.96	10
1911	42.0	+6.6	80	11	3.25	−0.49	9
1912	29.7	−5.7	68	−14	3.08	−0.66	7
1913	34.8	−0.6	77	− 2	2.94	−0.80	7
1914	32.2	−3.2	69	− 2	4.14	+0.40	11
1915	41.9	+6.5	75	13	1.74	−2.00	8
1916	34.9	−0.5	72	− 4	2.99	−0.75	9

Climatological data for February, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers
Western Division.																				
Beaver Dam	Ohio	441	12	36.2	+ 1.8	70	22	13	14†	34	2.83	−0.99	1.37	5.0	6	9	7	13	N	W. T. Austin.
Blandville	Ballard	445	34	36.8	+ 0.4	66	17	12	3	28	1.74	−3.02	0.48	1.7	8	10	8	11	NW	E. W. Horr.
Calhoun	McLean	437	12	37.2	+ 0.6	70	22	11	3	37	2.49	−1.33	1.05	1.2	7	6	14	9	NW	W. A. Taylor.
Earlington	Hopkins	420	25	35.6	− 0.8	72	22	12	3†	41	1.97	−2.03	1.17	3.0	6	13	1	15	SE	Brick Southworth.
Hopkinsville	Christian	524	19	39.2	+ 2.2	68	17†	12	3	34	1.53	−2.36	0.58	3.0	6	11	1	17	W	W. F. Randle.
Marion	Crittenden	571	17	......															......	B. C. Paris.
Owensboro	Daviess	479	18	35.7	+ 1.1	69	21	14	3	38	1.60	−1.89	0.50	1.0	6	10	9	10	NW	Henry S. Berry.
Paducah	McCracken	341	27	......						......	1.23	−2.47	0.55	1.0	5	......			......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	40.2	− 1.7	65	11†	12	3†	38	3.05	−1.45	0.70	6.8	8	11	1	17	N	W. W. Hicks.
Anchorage	Jefferson	700	14	32.4	+ 0.3	65	22	4	14†	37	2.43	−0.71	1.24	3.2	6	17	0	12	NW	C. E. Barret.
Bardstown	Nelson	637	18	35.2	+ 0.7	69	22	4	14	36	4.07	+0.16	1.35	6.7	10	13	4	12	NW	Chas. M. Talbott.
Bowling Green	Warren	500	26	35.9	− 1.3	69	22	9	14†	46	3.60	−0.55	1.00	1.5	8	17	8	4	N	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	......						......	2.99	−1.27	0.80	5.0	12	......			......	C. L. Hurt.
Cloverport	Breckenridge	375	2	......						......	2.41	......	1.03	1.8	10	......			......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	38.2	+ 1.8	68	22	8	14	40	1.87	−2.54	0.69	1.4	9	8	8	13	W	Miss Lee Ray.
Eubank	Pulaski	1177	21	31.1	− 2.2	66	22	2	14	47	3.66	−0.43	1.14	6.0	10	5	7	17	N	Mrs. Katie Payne.
Frankfort	Franklin	560	24	35.8	+ 1.0	70	22	4	15	40	3.73	+0.17	1.40	4.5	13	12	7	10	S	Mrs. Amelia Wood
Franklin	Simpson	691	21	38.2	− 0.4	67	17†	12	14	38	2.45	−2.44	0.61	2.5	6	6	14	9	NW	J. E. Newman.
Greensburg	Green	581	23	34.5	+ 0.8	68	22	6	14†	42	4.08	−0.05	1.15	3.0	10	6	13	10	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	......						......	3.71	+0.03	1.10	4.5	11	......			......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	35.8	+ 2.0	69	22	9	14	29	1.88	−1.63	0.74	1.0	6	11	7	11	NW	W. J. Piggott.
Leitchfield	Grayson	635	20	35.6	+ 1.6	68	22	8	14†	32	2.40	−1.38	0.95	4.0	7	7	13	9	NW	John E. Stone.
Lexington	Fayette	989	31	32.8	− 2.9	63	22	2	14	32	3.40	+0.06	1.61	7.1	11	8	4	17	SW	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	^{a}34.6	+ 0.7	72	22	2	15	36	1.73	−1.46	0.93	3.4	11	11	6	12	......	Loretto Academy.
LOUISVILLE	Jefferson	525	43	33.9	− 2.9	67	22	11	14	29	3.14	−0.70	1.36	2.6	10	10	3	16	NW	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	530	6	33.6	......	68	22	5	14	37	3.30	......	1.34	4.0	7	10	9	10	NW	Wm. I. Hunt.
St. John	Hardin	777	19	34.4	+ 1.4	67	20†	2	14	45	3.77	−0.21	1.31	6.5	9	13	5	11	......	Sisters of Loretto.
Scott	Kenton	900	18	31.0	+ 0.8	65	22	−1	15	33	2.49	−0.38	0.90	4.9	7	9	7	13	W	E. B. Wilson.
Shelby City	Boyle	1087	21	36.7	+ 3.6	66	22	0	14	39	3.83	+0.20	0.74	4.5	10	13	2	14	NW	H. F. Ewing.
Shelbyville	Shelby	825	26	31.8	− 2.2	67	22	1	14	37	3.59	−0.01	1.30	5.2	11	14	4	11	NW	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	34.0	− 0.2	66	22	2	14	37	3.02	−1.10	0.84	3.1	11	10	4	15	NW	E. D. Bourne.
Williamstown	Grant	943	13	31.2	+ 0.2	65	22	0	14	42	3.42	+0.14	1.48	3.4	9	10	8	11	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	34.0	+ 0.1	69	22	3	14	51	3.37	−1.07	0.91	5.2	12	10	7	12	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	35.6	− 0.2	65	22	1	14	40	2.20	−0.97	0.48	4.4	12	15	0	14	NW	C. F. Rumold.
Catlettsburg	Boyd	534	27	......						......	4.90	+1.00	1.42	9.0	14	......			......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	......						......	3.38	+0.14	1.40	5.0	8	8	6	15	......	J. V. Oldham.
Farmers	Rowan	668	9	35.2	− 0.4	68	1†	0	14	40	2.90	−0.27	1.00	......	8	15	4	10	W	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	......															......	
Jackson	Breathitt	776	4	......															......	Jas. L. McCoy.
London	Laurel	1190	1	......						......	2.10	......	0.60	2.5	12	......			......	C. R. Lee.
Louisa	Lawrence	584	11	......						......	3.45	−0.59	0.82	7.0	9	......			......	G. M. Guerin.
Manchester	Clay	1400	4	......						......	1.83	−1.11	0.62	7.4	8	......			......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	30.5	− 2.9	68	22	−4	14	48	3.74	+0.29	1.52	5.6	12	11	5	13	SE	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	38.8	− 0.1	67	12†	10	4	40	3.83	−1.09	0.87	13.0	12	16	3	10	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	31.4	− 1.9	65	22	−3	14	39	4.22	−0.05	1.32	5.7	12	8	3	18	NW	W. R. McKee.
Pikeville	Pike	634	9	...	......					......	3.66	+0.15	0.82	11.0	......				......	I. M. Williams.
Richmond	Madison	926	23	35.2	+ 0.3	65	22	0	14	31	4.31	+0.67	1.25	9.1	12	11	2	16	......	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	2	31.1	......	58	21	8	4†	34	3.13	......	0.90	15.6	10	13	2	14	......	O. A. Lund.
Williamsburg	Whitley	939	19	37.0	− 0.5	68	17†	12	14†	48	3.10	−0.39	0.60	6.5	11	12	3	14	W	N. C. Jones.
State averages and extremes				34.9	......	72	22	−4	14	51	2.99	......	1.61	5.0	9	11	6	12	NW	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used n determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for February, 1916.

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G						.40			.04				1.37										[illegible]	.50				.37				[illegible]
Blandville	M		T			T	.32		.03				.18	.44									.02	.13	.07		T		.30				[illegible]
Calhoun	G		T				.21		T	.07			1.05	.53										.31	.27	T.	.05	T.	T	T			[illegible]
Earlington ‡	G			T			.28			.07				1.17										.22	.18					[illegible]			[illegible]
Hopkinsville	C						.20			.13			.09	.43										[illegible]					.10				[illegible]
Marion	O																																
Owensboro	O		T				.22			.05			.48	.05										.40	.30	T	T	T	T.				[illegible]
Paducah	O						.26			.06				.50										T	.25					.16			[illegible]
Central Division.																																	
Alpha	C	.70	.20				.51			.51				.08										.57	.08	T	T.		.40				[illegible]
Anchorage	O						.39		.03				1.24	.44					T.					.30			T		.03				[illegible]
Bardstown ‡	S	.76					.26			.22			.05	1.35										.36	.78	.12			.05	[illegible]			4.07
Bowling Green	G	.85					.25	.05			.15			1.00	T.	T.								.35	.75			T		.26			[illegible]
Burnside	C	.80	.20				.12	.18		.50	.10			.13										.15	.41	.05		.15		.20			[illegible]
Cloverport ‡	O	.02		T.			.13	.07		.08			.01	1.03										.34	.67		T.	.04		.02			2.41
Edmonton	G	.11	.10				.36			.09			T	.27										.69	.20	.03			.02				1.87
Eubank	C	1.14	.14				.30	.05		.70				.40											.75	.05		.08		.05			3.66
Frankfort	K	.60					.33	.03		.16			.16	1.40	.02					T				.11	.78	.05	.02	.05		.02			[illegible]
Franklin	G		T				.28			.61			.11	.30		T.							T	.55	T	T	T	T.	.60				2.45
Greensburg	G	1.15	.05				.31	.06		.53				.78										.15	.87	.03	T.	T		.15			4.68
High Bridge ‡	K	.65	.02				.33	.03		.25			.03	1.05										.15	1.10	.05				.05			[illegible]
Irvington	O		T.				.15		.09	T			.74	.35					T					.15	.40	T.	T.		T.				1.88
Leitchfield	G									.07			.95	.30										*	.98		.05		.05				2.40
Lexington ***	K	T.	.01				.33	T.	.07	.10		.01	1.08	.63					T				T	.74	.35	T	.06	T	.02				3.40
Loretto	S	.08				.05	.16		.01	.19	T.		.93	.21		T.							.02			.02	T.	.01	T	.05			1.73
Louisville***	O		T				.43	T.	.01			.11	1.27	.09					T				.26	.24	.67	T.	.04		.02				3.14
Do. (Cherokee Park)	O	.22					.41			.04				1.34						T				*	1.22		.04			.03			3.30
St. John	S	.63					.25			.12				1.31										.32	.98	.10	.02			.04			3.77
Scott	L		T.				.43		T.				.90	.65					T.	T				.15	.27	T	.02	.07		T.			2.19
Shelby City	K	.37	.15				.45			.43			.28	.57										.74	.67		.08			.09			3.83
Shelbyville ‡	S	.62					.37	.03		.09			.10	1.30										.13	.83	.05		.04		.03			3.59
Taylorsville	S		T.	T.	T.		.34		.06	.08			.74	.48					.01	T				.41	.84	T.	.01	T	.02	.03			3.02
Williamstown	L	.43					.40			.03			.32	1.48										.08	.63	.03		.02		T			3.12
Eastern Division.																																	
Beattyville	K	.91	.40	T.			.10	.04		.40	T		.02	.75	T					T				.10	.70	.03	T	.03		.09			3.37
Berea	K	.12	.02				.28			.24			.40	.18					T.					.48	.22	.12	.12	.01	.01				2.20
Catlettsburg	B	.96	.40	.08		T.	.32	.10	T.	.22	T	T.	.30	1.42	T.		T		.08		T		T	.10	.40	.40	.06	T.		.06			4.90
Falmouth	L	.47	T.				.40	T.		.01			.44	1.40	T.					T.				.10	.54	.02		T		T.			3.38
Farmers	L			T.			.24	T.		.24			1.00		.30	.10							.20	.32	.50	T				T			2.90
Hazard	K																																
Jackson	K																				.02			.07	.28	.27	.05	.11					
London	C	.60	.20					.05		.60	.10				.10									.05	.11	.04	.10	.03		.12			2.10
Louisa	B	.82	.40				.07			.45				.50	.30					.08					.45	.38							3.45
Manchester	K	.62	.32											.20						.02				.09	.38			.10		.10			1.83
Maysville	O	.75	T.	T.			.37	.03		.08			.34	1.52	T.					.02				.09	.44	.15		.04		.01			3.74
Middlesboro	C	.87	.70						.05	.68				.12										.65	.14	.05	.05	.07	.20	.25			3.83
Mount Sterling	L	1.32	.06				.31	.11		.35			.13	.90						T				.15	.70	.06		.07		.06			4.22
Pikeville	B	.82	.78	.10	T.			T.		.38	.10			.16	.06					T.				T.	.52	.54	T.	.12		.08			3.66
Richmond	K	1.25	.20				.10	.30		.30				.87					T.	.03				.23	.85	.04		.07		.07			4.31
Weeksbury	B	T.	.90				.10			.40			T.	.18	T				T.	T.				.30	.70	.30	.10	.10	.05				3.13
Williamsburg	C	.60	.29	T.				.05		.52	.12			.24	T					T.				.33	.14	.11	T.	.10		.30			3.10

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

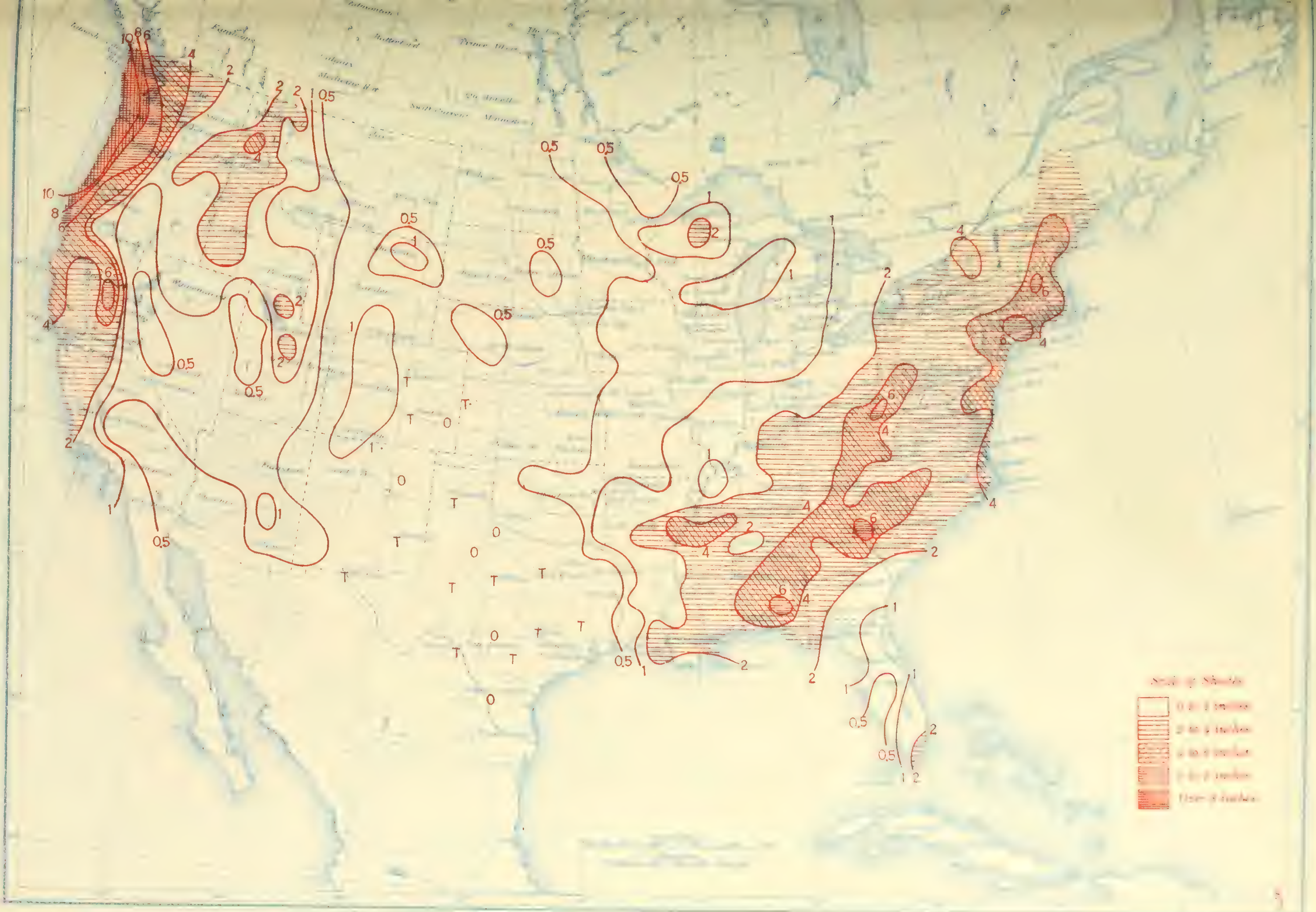
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for February, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	29	22	30	43	52	38	27	42	43	56	63	60	31	29	36	53	61	45	50	64	60	70	54	45	36	35	32	31	38	..	..	44.0
	Minimum	22	19	14	18	35	35	24	17	34	24	29	55	27	13	13	24	38	39	23	40	35	37	48	35	31	27	23	21	26	..	..	28.5
Blandville	Maximum	25	22	31	42	53	44	30	39	43	57	57	59	35	32	41	51	66	52	52	64	58	62	54	52	47	41	34	28	38	..	..	45.1
	Minimum	19	15	12	22	37	30	20	18	33	29	39	35	25	17	20	30	41	34	25	39	35	46	37	34	31	31	23	24	25	..	..	28.5
Calhoun	Maximum	36	23	32	43	54	44	32	40	45	57	64	60	41	30	38	57	64	59	53	67	67	70	63	48	48	36	34	33	40	..	..	47.5
	Minimum	20	17	11	20	36	30	19	15	32	24	33	40	25	14	14	25	38	35	23	40	30	42	41	34	30	27	23	20	25	..	..	27.0
Earlington §§	Maximum	26	20	32	46	54	35	28	43	42	60	65	59	31	34	40	57	68	45	51	67	62	72	54	47	36	37	33	30	37	..	..	45.2
	Minimum	21	18	12	14	24	33	22	16	22	24	24	44	25	14	12	20	31	37	23	27	45	37	52	34	31	25	22	20	25	..	..	26.0
Hopkinsville	Maximum	56	44	33	41	54	53	41	46	46	60	63	59	54	36	40	57	68	62	52	67	62	68	58	49	45	38	35	31	35	..	..	50.2
	Minimum	22	18	12	20	30	34	24	18	35	27	32	54	26	16	16	24	37	38	25	39	36	41	41	35	31	27	18	21	25	..	..	28.3
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro §§	Maximum	26	28	41	41	39	30	36	41	54	63	59	40	31	37	53	51	49	50	62	57	69	54	47	45	35	30	30	37	36	..	..	43.8
	Minimum	20	18	14	21	36	30	18	15	33	28	34	40	30	16	16	26	34	34	24	38	32	39	41	34	30	28	22	22	26	..	..	27.6
Central Division																																	
Alpha	Maximum	34	30	34	50	53	52	47	56	42	59	65	63	61	33	45	54	65	47	42	64	64	65	57	51	38	35	34	30	35	..	..	48.4
	Minimum	30	22	12	20	40	47	30	22	41	27	33	61	23	12	13	24	47	42	19	42	38	57	51	38	32	30	22	22	27	..	..	31.9
Anchorage	Maximum	36	25	27	37	45	37	32	39	40	50	63	59	36	23	37	49	59	45	46	61	51	65	56	43	41	35	31	30	36	..	..	42.6
	Minimum	22	18	12	15	31	32	15	13	26	22	32	36	19	4	4	12	32	12	16	34	29	31	39	31	31	25	20	14	21	..	..	22.3
Bardstown §§	Maximum	34	27	32	45	49	45	30	42	42	47	66	61	27	28	42	53	63	46	47	64	56	69	53	42	35	38	33	32	39	..	..	44.4
	Minimum	28	21	13	20	32	37	24	15	21	25	30	35	22	4	6	21	33	37	19	35	33	37	45	35	33	28	22	18	22	..	..	25.9
Bowling Green §§	Maximum	59	26	32	47	55	47	45	37	46	44	60	64	34	30	40	56	68	56	65	67	63	69	56	48	38	36	35	31	38	..	..	48.0
	Minimum	23	18	10	15	18	37	21	18	15	30	24	28	24	9	9	17	34	35	19	29	28	37	47	33	28	25	20	16	23	..	..	23.8
Edmonton	Maximum	51	30	29	45	54	50	39	54	56	60	66	63	63	26	42	53	65	60	42	65	62	68	67	53	52	37	33	28	35	..	..	49.9
	Minimum	28	20	10	16	27	36	24	19	37	20	29	55	23	8	10	20	34	36	18	31	36	40	36	35	30	27	22	18	26	..	..	26.6
Eubank §§	Maximum	51	40	37	47	52	47	44	51	47	61	64	62	45	45	49	54	65	55	39	64	65	66	51	45	41	36	33	31	33	..	..	49.0
	Minimum	31	19	10	10	18	37	27	16	18	24	24	32	41	2	3	8	20	38	15	17	34	36	43	35	31	27	20	16	22	..	..	23.2
Frankfort	Maximum	49	34	30	40	51	41	41	39	43	51	63	66	49	27	34	49	60	58	44	62	59	70	68	51	44	40	36	36	39	..	..	47.4
	Minimum	26	20	14	18	31	29	19	13	32	25	27	40	19	5	4	15	30	32	19	31	31	30	42	33	32	28	21	16	24	..	..	24.3
Franklin	Maximum	39	26	32	44	55	49	40	53	49	57	65	64	48	28	40	55	67	56	49	66	62	67	55	45	40	37	37	33	35	..	..	48.0
	Minimum	23	17	13	20	33	37	21	20	33	28	38	47	24	12	15	17	41	32	23	39	37	49	42	36	30	27	23	22	26	..	..	28.4
Greensburg §§	Maximum	36	26	31	44	53	48	32	51	43	57	66	62	27	25	40	53	63	44	46	63	60	68	53	43	34	39	34	30	39	..	..	45.2
	Minimum	30	21	14	15	22	36	25	18	20	24	24	29	24	6	6	13	24	35	18	21	37	32	35	35	33	29	23	18	22	..	..	23.8
Irvington	Maximum	33	27	28	41	49	45	35	41	42	54	63	59	33	23	36	51	55	52	47	63	55	69	60	47	44	37	32	32	37	..	..	44.5
	Minimum	20	17	13	20	35	35	18	17	35	37	37	33	21	9	11	25	37	33	22	37	31	40	41	34	35	28	21	21	25	..	..	27.2
Leitchfield	Maximum	32	25	29	43	52	48	32	43	42	56	63	59	42	24	38	53	60	50	48	64	59	68	60	48	43	38	31	33	34	..	..	45.4
	Minimum	24	18	11	18	30	32	20	17	33	24	33	42	18	8	8	21	35	32	20	34	36	38	45	33	30	27	21	19	25	..	..	25.9
Lexington	Maximum	35	24	25	38	45	45	31	43	36	58	61	59	30	26	33	46	56	47	39	59	60	63	52	38	37	32	28	32	32	..	..	41.7
	Minimum	20	18	12	20	33	31	13	12	32	27	40	30	8	2	11	25	38	20	17	34	28	45	38	32	27	19	16	18	23	..	..	23.8
Loretto	Maximum	42	28	29	42	53	46	37	45	44	55	64	61	25	24	36	51	61	45	45	64	58	72	..	45	34	42	40	40	37	..	..	45.2
	Minimum	27	20	12	14	28	35	21	15	34	22	29	25	19	3	2	18	40	34	17	37	33	49	..	32	20	21	12	23	26	..	..	23.9
Louisville	Maximum	35	24	29	37	46	38	29	38	42	51	62	58	29	22	36	51	59	47	46	60	51	67	50	45	40	35	31	31	37	..	..	42.3
	Minimum	21	17	13	22	34	29	15	15	32	27	36	29	18	11	13	27	41	24	22	35	32	41	38	33	28	23	19	21	24	..	..	25.5
Do. (Cherokee Park)	Maximum	39	26	23	37	46	44	32	36	39	49	62	59	38	21	34	49	57	56	46	61	58	68	64	42	43	36	31	31	34	..	..	43.5
	Minimum	22	17	12	18	31	32	17	12	31	22	28	36	19	5	7	19	35	34	19	34	30	31	40	32	31	24	19	11	21	..	..	23.8
St. John §§	Maximum	32	24	30	40	53	42	26	42	49	55	62	59	24	42	39	52	63	43	47	67	55	67	51	47	34	58	63	52	27	..	..	46.4
	Minimum	25	19	11	13	23	36	20	10	19	23	25	32	22	2	5	15	21	37	18	22	34	35	42	34	31	28	18	10	21	..	..	22.4
Scott	Maximum	39	26	28	32	46	38	35	29	39	45	58	56	32	21	32	44	55	50	37	57	45	65	56	38	37	32	29	31	36	..	..	40.3
	Minimum	22	18	12	15	28	31	12	6	28	18	29	32	17	3	-1	14	34	28	17	30	29	32	38	32	30	26	17	13	20	..	..	21.7
Shelby City	Maximum	47	32	33	40	50	51	39	51	51	58	63	62	58	24	38	52	64	62	44	65	58	66	65	51	37	35	34	30	35	..	..	48.1
	Minimum	29	20	9	13	25	35	22	16	35	25	29	54	19	0	3	17	41	35	16	36	32	33	48	34	31	28	20	14	14	..	..	25.3
Shelbyville §§	Maximum	33	25	28	40	48	41	25	39	40	51	62	56	25	25	32	49	59	42	43	63	52	67	51	40	37	35	32	32	35	..	..	41.6
	Minimum	22	18	12	13	21	33	19	12	18	23	25	35	20	1	5	14	25	34	17	28	30	33	42	33	32	26	20	10	20	..	..	22.1
Taylorsville	Maximum	40	25	28	38	49	42	35	40	40	51	62	59	41	20	33	49	58	49	45	62	53	66	59	42	41	37	32	31	34	..	..	43.5
	Minimum	25	20	13	18	30	34	20	14	33	23	27	41	19	2	3	15	30	31	18	33	31	29	42	34	32	28	22	17	23	..	..	24.4
Williamstown §§	Maximum	39	28	29	38	47	42	27	37	39	48	60	54	45	35	38	37	60	63	43	61	49	65	49	37	34	34	31	34	35	..	..	42.7
	Minimum	23	18	10	10	16	31	16	7	13	19	20	30	16	0	1	9	20	34	23	19	28	29	43	31	30	24	18	14	17	..	..	19.6
Eastern Division																																	
Beattyville §§	Maximum	37	27	32	41	49	48	33	56	40	59	68	64	27	26	45	55	67	49	39	67	57	69	55	41	36	35	35	33	36	..	..	45.7
	Minimum	36	22	15	10	12	29	29	16	18	29	29	29	25	3	5	9	16	28	19	20	33	28	29	41	35	30	21	13	16	..	..	22.2
Berea	Maximum	46	28	23	41	58	43	39	53	55	58	62	58	58	18	38	46	60	53	40	62	62	65	60	58	36	32	35	27	32	..	..	46.4
	Minimum	28	19	12	10	28	38	23	16	25	24	32	56	18	1	4	19	36	30	18	29	31	35	38	34	30	27	27	12	22	..	..	24.9
Farmers	Maximum	68	50	28	36	47	49	41	35	37	52	68	29	25	40	50	60	58	33	62	57	68	60	50	37	36	32	30	32	36	..	..	45.0
	Minimum	47	20	16	12	28	32	22	23	34	31	29	20	12	0	28	29	31	16	29	28	28	45	36	34	28	26	24	13	18	..	..	25.5
Maysville §§	Maximum	36	28	30	38	51	42	25	37	37	47	64	56	24	25	34	48	59	47	40	62	50	68	49	37	37	35	33	33	37	..	..	41.7
	Minimum	29	21	14	15	19	31	21	10	13	20	20	27	19	4	-3	7	11	30	17	20	30	27	28	34	31	26	19	13	15	..	..	19.3
Middlesboro	Maximum	59	34	31	43	49	54	52	54	55	59	61	67	64	33	46	55	64	60	42	67	66	64	59	50	39	28	34	32	37	..	..	50.6
	Minimum	23	25	16	10	22	29	31	22	43	28	27	49	24	12	14	19	26	31	21	31	30	31	49	37	33	28	21	17	27	..	..	27.1
Mount Sterling §§	Maximum	33	25	25	37	52	46	26	41	47	46	61	60	27	19	31	45	56	46	41	59	61	65	53	37	34	34	29	32	35	..	..	41.1
	Minimum	31	20	11	11	21	34	23	13	17	23	24	33	20	-3	2	9	23	39	16	20	29	33	45	34	31	27	17	12	17	..	..	21.5
Richmond §§	Maximum	44	38	26	34	47	46	41	43	36	57	63	61	34	24	36	48	61	45	40	62	55	65	51	37	34	23	32	32	35	..	..	43.4
	Minimum	30	20	12	18	30	34	24	15	33	26	34	50	21	0	6	27	39	40	18	35	32	36	48	34	33	27	20	18	25	..	..	27.1
Weeksbury	Maximum	20	24	21	30	38	36	30	53	40	12	43	55	50	20	32	40	50	32	33	56	58	56	50	42	33	32	28	31	30	..	..	38.1
	Minimum	16	18	17	8	20	20	20	19	39	29	28	30	25	8	11	20	31	32	17	32	30	32	46	24	32	28	16	25	26	..	..	24.1
Williamsburg §§	Maximum	55	28	29	47	55	48	45	58	45	61	65	62	39	28	43	55	68	58	59	66	63	68	60	44	36	34	39	40	37	..	..	49.5
	Minimum	37	23	14	13	17	37	31	20	23	30	31	38	31	12	12	14	22	34	18	18	20	32	38	40	35	20	19	17	17	..	..	24.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc. days missing from record.


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

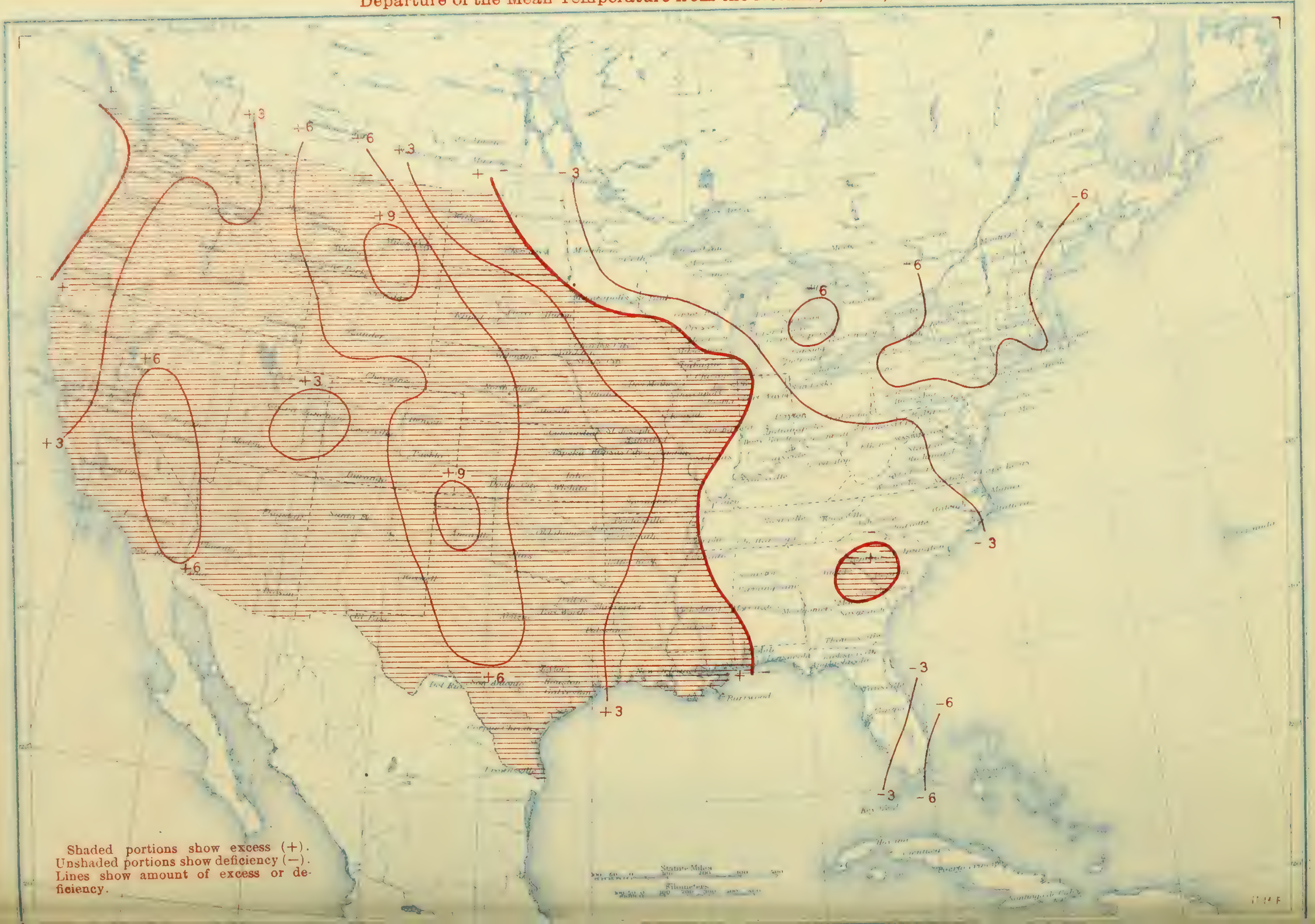
KENTUCKY SECTION

MARCH, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 21, 1916

Departure of the Mean Temperature from the Normal, March, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXI. Louisville, Ky., March, 1916. No. 3

GENERAL SUMMARY.

The weather during March was generally disagreeable, with high winds on many days, and numerous and decided changes in temperature. Temperature fluctuations occurred in periods of three to five days, the mean temperature being first much below and then far above normal. The frequent hard freezes were injurious to wheat, especially in the western part of the State where precipitation was light.

Precipitation was frequent, but 24-hour amounts were generally light and the monthly totals considerably below normal, except at a few stations in the eastern counties. The amount over the western counties was only about one-half the normal precipitation for March, and over practically the same area where there was also a large deficiency in February. General snowstorms occurred on the 3d and 15th. Conditions were decidedly unfavorable for outdoor work, and farming operations made but little progress. Thunderstorms occurred on a number of days, notably, the 6th, 7th, 13th, 22d, 25th and 26th.

PRESSURE.

Low pressure areas of great energy dominated weather conditions on most days. Two of these disturbances were of great strength and intensity, and produced gales of destructive violence over this State. The first of these disturbances appeared in the far northwest on the 4th, moved southeastward and passed over the State on the 6th with very low pressure readings. It moved eastward so slowly that its influence continued over the eastern half of the State until the 9th. The other storm appeared in the far northwest on the 20th, moved southeastward to the Mississippi Valley on the 21st, the center passing over the northern part of this State on the morning of the 22d with the extremely low sea-level readings of 29.15 inches at Louisville, 29.14 inches at Lexington and 29.06 inches at Cincinnati.

The mean sea-level pressure for the State, based on the records of two stations, was 29.99 inches. The extremes in pressure were 30.47 inches at Louisville on the 17th, and 29.14 inches at Lexington on the 22d.

TEMPERATURE.

The mean temperature for the State, determined from the records of 36 stations, was 43.5°, which is 2.8° below normal for March. The monthly extremes were 84° at Beattyville on the 24th, and 4° at Anchorage and Williamstown on the 4th. There were several days with severe temperatures, notably the 4th, when minimum temperatures registered from 4° to 16° at most stations; also on the 9th and 16th minimum temperatures were low, registering generally between 6° and 20°. There were a few warm days scattered through the month, the warmest being in the period 21st-22d and 24-26th with maximum temperatures in the 80's at a few stations.

PRECIPITATION.

The average precipitation for the State, based on the records of 46 stations, was 3.39 inches, which is 1.5 inches less than normal. At the various stations amounts ranged between 1.80 inches at Irvington and 5.50 inches at Maysville. Over the western counties and a considerable area in the upper Cumberland basin, amounts were generally less than 3 inches. Over the remainder of the State the precipitation ranged between 3 and 5 inches, being heaviest over an area from the upper Kentucky northeastward to the Ohio. The total snowfall averaged 3.7 inches, and ranged between 0.9 inch at Blandville and 11.4 inches at Williamstown.

WIND.

The total wind movement at Louisville was 11119 miles and at Lexington 11331 miles, with average hourly velocities of 14.9 and 15.2 miles, respectively. The wind movement at Louisville is one of the highest on record for any month. The maximum velocity for five minutes at Louisville was at the rate of 72 miles per hour from the west on the 7th, and at Lexington 62 miles per hour from the northwest on the same date. High winds also occurred on the 22d, when a maximum velocity of 70 miles per hour was registered at Louisville and 56 miles per hour at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 72 per cent, at 2 p. m. 55 per cent and at 7 p. m. 62 per cent

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 46 and at Lexington 43, which are low records for March.

MISCELLANEOUS.

March 7th.—The damage by wind in Louisville and vicinity was estimated at $30,000. Factory buildings were unroofed, plate glass windows blown out, vehicles blown over in the street, and pedestrians carried off their feet by the gales.

March 22d.—Considerable damage was done by wind in Lexington and Louisville and throughout the central counties. In Louisville buildings were unroofed, windows blown out, and several persons injured. In the central counties the principal damage was sustained by the telephone and telegraph companies.

Thunderstorms were frequent, but no damage by lightning was reported.

Rivers.—Good stages prevailed in the streams of the State during the month. A sharp rise began on the 23d in the upper reaches of the Ohio River, mainly due to melting snow in the mountains of western Pennsylvania. At Portsmouth, Ohio, flood stage was reached on the 30th, and at Catlettsburg, Maysville and Cincinnati on the 31st. At the close of the month the Ohio was still rising at all points along the border of the State.

ERRATA

February, 1916: Eubank—monthly mean should be 36.1, and mean temperature for the State should be 35.0

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	40.5	−5.8	84	18	1.52	−3.37	..
1890	41.2	−5.1	78	4	8.34	+3.45	
1891	41.8	−4.5	71	9	8.08	+3.19	
1892	40.6	−5.7	82	7	4.08	−0.81	.
1893	45.0	−1.3	89	5	2.76	−2.13	.
1894	50.8	+4.5	86	10	2.72	−2.17	.
1895	45.0	−1.3	88	15	3.17	−1.72	9
1896	41.1	−5.2	80	8	6.16	+1.27	12
1897	49.6	+3.3	86	20	7.94	+3.05	14
1898	50.7	+4.4	84	16	7.59	+2.70	13
1899	43.9	−2.4	80	−3	8.10	+3.21	15
1900	42.8	−3.5	81	3	2.58	−2.31	9
1901	46.4	+0.1	87	3	3.50	−1.39	10
1902	47.2	+0.9	82	7	4.44	−0.45	11
1903	52.5	+6.2	85	19	4.43	−0.46	12
1904	47.7	+1.4	88	12	6.26	+1.37	12
1905	52.2	+5.9	86	22	4.45	−0.44	9
1906	39.2	−7.1	75	3	6.37	+1.48	16
1907	54.9	+8.6	92	18	2.28	−2.61	10
1908	51.8	+5.5	88	19	5.42	+0.53	13
1909	44.8	−1.5	74	17	5.14	+0.25	11
1910	55.0	+8.7	91	11	0.79	−4.10	3
1911	46.0	−0.3	87	7	2.57	−2.32	9
1912	41.3	−5.0	88	10	6.22	+1.33	15
1913	46.5	+0.2	85	9	7.22	+2.33	10
1914	41.8	−4.5	78	2	3.62	−1.27	12
1915	37.8	−8.5	65	11	2.11	−2.78	8
1916	43.5	−2.8	84	4	3.39	−1.50	10

Climatological data for March, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers
Western Division.																				
Beaver Dam	Ohio	441	12	45.2	−2.3	76	13†	16	4	38	2.44	−1.90	0.71	2.5	6	12	11	8	SW	W. T. Austin.
Blandville	Ballard	445	34	46.7	−0.4	79	21	18	4	37	2.94	−1.93	0.95	0.9	9	13	9	9	SE	E. W. Horr.
Calhoun	McLean	437	12	45.5	−4.3	78	13	14	4	39	3.00	−1.62	0.70	2.5	11	5	19	7	SW	W. A. Taylor.
Earlington	Hopkins	420	25	44.6	−2.9	80	21	14	4	43	2.28	−3.23	0.85	5.2	10	15	0	16	SE	Brick Southworth.
Hopkinsville	Christian	524	19	48.7	−0.5	82	21	16	4	37	3.30	−1.54	0.95	3.0	6	11	5	15	W	W. F. Randle.
Marion	Crittenden	571	17	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	B. C. Paris.
Owensboro	Daviess	479	18	44.4	−2.5	75	23	15	4	46	3.35	−2.43	0.64	1.0	7	9	11	11	NW	Henry S. Berry.
Paducah	McCracken	341	27	....	....	....	....	....	....	....	2.68	−2.02	0.86	....	6	....	....	....	....	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	47.4	−3.3	75	24†	15	4†	36	3.53	−2.64	0.80	4.0	8	15	4	12	S	W. W. Hicks.
Anchorage	Jefferson	700	14	41.2	−3.9	77	24	4	4	38	4.19	+0.21	0.98	7.5	11	14	7	10	SW	C. E. Barret.
Bardstown	Nelson	637	18	44.0	+3.6	78	24	12	4	46	3.63	−1.39	0.61	4.2	12	12	8	11	S	Chas. M. Talbott.
Bowling Green	Warren	500	26	45.6	−3.0	82	13†	12	4	52	2.83	−2.30	1.02	1.0	8	20	5	6	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	....	....	....	....	....	....	....	3.08	−2.19	0.70	1.0	9	....	....	....	....	C. L. Hurt.
Cloverport	Breckenridge	375	2	....	....	....	....	....	....	....	2.50	....	0.70	2.5	9	....	....	....	....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	^{a}46.0	−2.2	77	13†	14	4	48	2.66	−3.17	0.77	1.0	7	4	16	11	W	Miss Lee Ray.
Eubank	Pulaski	1177	21	^{b}44.4	−1.9	79	25	8	4	49^{b}	4.16	−1.09	0.80	3.0	7	10^{b}	1^{b}	18^{b}	NW	Mrs. Katie Payne.
Frankfort	Franklin	560	24	44.2	−2.0	80	25	10	4	40	3.03	−2.24	1.00	3.5	14	13	6	12	S	Mrs. Amelia Wood
Franklin	Simpson	691	21	47.2	−2.9	80	21	16	4	44	3.23	−1.52	0.90	2.5	10	6	15	10	NW	J. E. Newman.
Greensburg	Green	581	23	43.6	−3.2	79	25	14	4	15	3.84	−1.66	1.10	2.7	9	3	19	9	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	....	....	....	....	....	....	....	3.22	−1.14	0.73	1.5	10	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	18	44.9	−2.8	76	24	14	4	37	1.80	−3.10	0.51	3.5	9	12	5	14	SW	W. J. Piggott.
Leitchfield	Grayson	635	20	^{a}43.4	−2.6	76	13	14	4	39^{a}	2.33	−2.46	0.74	2.3	8	8^{a}	11^{a}	11^{a}	NW	John E. Stone.
Lexington	Fayette	989	31	41.2	−2.2	76	25	9	4	39	3.30	−1.42	1.35	3.9	14	10	5	16	S	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	43.7	−4.4	80	26	10	1	48	2.98	−1.64	0.75	1.7	14	9	7	15	....	Loretto Academy.
LOUISVILLE	Jefferson	525	43	43.2	−2.1	76	24	13	4	38	3.85	−0.47	1.12	5.0	13	8	9	14	N	U. S. Weather Bureau.
Do (Cherokee Park)	Do	530	6	43.0	....	78	24	10	4	39	3.18	....	1.14	5.2	8	7	12	12	NW	Wm. I. Hunt.
St John	Hardin	777	19	41.2	−3.9	76	24	11	4	44	2.91	−2.08	0.78	....	12	18	3	10	N	Sisters of Loretto.
Scott	Kenton	900	18	40.0	−4.3	77	25	7	4	36	3.74	−0.77	0.91	6.7	14	10	11	10	S	E. B. Wilson.
Shelby City	Boyle	1087	21	44.2	−1.9	79	25	6	4	42	4.40	−0.71	0.97	4.0	14	11	9	11	S	H. F. Ewing.
Shelbyville	Shelby	825	26	40.8	−4.5	76	24†	6	4	47	3.47	−1.44	1.06	6.1	15	13	4	14	SE	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	42.8	−4.8	77	24	9	4	38	3.01	−1.55	0.60	4.4	12	9	8	14	NW	E. D. Bourne.
Williamstown	Grant	943	13	40.2	−4.7	76	25	4	4	51	3.78	−0.56	1.10	11.4	11	13	7	11	....	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	42.2	−4.0	84	25	7	4	51	5.01	−0.05	1.15	5.4	12	12	11	8	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	42.4	−4.9	73	24	6	16	36	2.45	−2.48	1.30	4.0	6	22	5	4	SW	C. F. Rumold.
Catlettsburg	Boyd	534	27	....	....	....	....	....	....	....	4.54	+1.02	1.10	4.0	13	....	....	....	....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	....	....	....	....	....	....	....	4.32	−0.04	1.18	5.0	13	13	8	10	....	J. V. Oldham.
Farmers	Rowan	668	9	40.1	−4.8	75	27	10	4†	40	....	....	....	....	....	15	3	13	N	Mrs. Lurlene Triplett.
Hazard	Perry	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jackson	Breathitt	776	4	....	....	....	....	....	....	....	5.19	....	1.19	3.0	14	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	1	....	....	....	....	....	....	....	2.31	....	0.60	....	12	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	11	....	....	....	....	....	....	....	4.07	+0.34	0.97	4.0	10	....	....	....	....	G. M. Guerin.
Manchester	Clay	1400	4	....	....	....	....	....	....	....	2.53	−1.97	0.63	3.5	10	....	....	....	....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	39.6	−4.5	77	24†	5	4	50	5.50	+0.86	1.79	7.6	15	13	4	14	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	47.2	−1.3	80	25†	14	4	45	3.22	−2.26	1.03	T.	9	18	9	4	....	B. H. Perkins.
Mount Sterling	Montgomery	930	25	40.4	−3.7	80	25	5	4	48	5.00	−0.93	1.41	....	10	17	3	11	NW	W. R. McKee.
Pikeville	Pike	634	9	....	....	....	....	....	....	....	4.62	+0.41	1.18	3.0	13	....	....	....	....	I. M. Williams.
Richmond	Madison	926	23	43.8	−1.5	80	25	8	4	40	2.88	−1.84	0.80	5.0	13	13	7	11	....	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	2	39.1	....	73	26	11	5	39	3.95	....	1.00	6.1	8	15	4	12	....	O. A. Lund.
Williamsburg	Whitley	939	19	45.6	−0.5	81	25	15	4†	58	2.68	−2.21	0.95	2.2	8	16	4	11	S	N. C. Jones.
State averages and extremes.				43.5	....	84	25	4	4	....	3.39	....	1.79	3.7	10	12	8	11	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post office addresses of these stations are as follows: Loretto, Nerinx, Ky: Weeksbury, Melvin, Ky

Daily Precipitation for March, 1916.

Day of month.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																	
Beaver Dam	G		.71					15	10							19											40						[illegible]
Blandville	M	.95		.01			12		T.		[illegible]				11	T	T				19					.60	.22	.07					2.94
Calhoun	G	60	16	09				70	T		[illegible]				[illegible]	.47					03		01			[illegible]	[illegible]	T					[illegible]
Farmington	G		80	08				.35	05		02				03	30										[illegible]	[illegible]	[illegible]					[illegible]
Hopkinsville	C	.95		T				15			T				75	.45					T					52	18						[illegible]
Marion	O																																
Owensboro	O	61	05	T				62	T					T	27	17					T		T				06		T				[illegible]
Paducah	O		86	T				.68	T	T				T	15	46						T				20	.33						[illegible]
Central Division.																																	
Alpha	C	.75	25	T			78		.10		T.				.25	.30							T			[illegible]	[illegible]		T.	T			3.53
Anchorage	O	82	51	.10				58	.05						98	.33					06		T			[illegible]	18	[illegible]	T				[illegible]
Bardstown	S		56	.20				61			03			.08	.05	.58						07					[illegible]	[illegible]	31	[illegible]			[illegible]
Bowling Green‖	G																																
Burnside	C		.50	.08	T			70		T						.15				T.		20	T.	T			62	[illegible]	40	01	T		[illegible]
Cloverport ‡	O		56	.11	T			51	T	T	T			.12	T.	.70	T					02		T			.35	08	T	.02			[illegible]
Edmonton	G	.68	.11												.31	.42										36	77	.01					2.66
Eubank	C		70					75		.03						.80											.61	[illegible]	.72				4.16
Frankfort	K		29	.15	.02		T	56	04	T	03			T	.19	1.00	.02					10	.03				.36	.16	T.	08			[illegible]
Franklin	G	63	.10	T.				90	06		06				.23	.48					T		T.			.38	.24	.15					[illegible]
Greensburg	G		.50	07				55	05	.02						1.10						.09					15	1.01					3.84
High Bridge	K		35	10			.59							10		.70	T					04					33	13	11	.07			[illegible]
Irvington	O	25	T.	.09				27	.09					07	51	.07					T.		T			36	.09		T				1.80
Leitchfield	G	.74	T.	.05			48	T	03		T			T	*	.80					T.	T				11	12		T				[illegible]
Lexington ***	K	.26	.06	.12			40	.02	T		T			T.	.46	.19					.24		04		T	.22	1.15	.06	07	01			3.30
Loretto	S	.37		.25		T		09	01		.03			.04	.75	12					.05		02			52	.70	.02	T	.01			2.98
Louisville***	O	.45	13	.06		T.	64	.24	01		T			11	1.10	02					.11		02			.10	.86	T.	T	T.			3.85
Do (Cherokee Park)	O		.48	30				.61	03					.08		1.14					.16						.38						3.18
St John	S	.76		.09				45	10					04	04	78						04					37	18	04	02			2.91
Scott	L	05	.35	T	T		06	.91	T		.04			T	70	27					T	.03	03		T	03	82	29	12	.04			3.74
Shelby City	K	.11	40	.10				.75	.10		08			15	21	73					04					T.	.97	69	03	.04			4.40
Shelbyville	S		.49	19	.20			.54	.02	T	.05			02	67	1.06	20					10	03				.30	18	T	.02			3.17
Taylorsville	S	.40	.07	.16				.47	.02		.01			06	.50	.27					18	T	T.			27	.60						3.01
Williamstown	L		.37	40	.04			82		.03	.03					1.10						.11	T	T			.57	.15	T	.16			3.78
Eastern Division.																																	
Beattyville	K		.59	.20	04			.75		T.					16	.50	.30					.09	T				.04	1.15	82	37			5.01
Berea	K	48	05	.15	T			T.	T		T				1.30	.22	T.				.25					T							2.45
Catlettsburg	B		.26	.12	15			10			T	16			.06	.90	T.					.20	06	10				1.10	.50	.58			4.29
Falmouth	L		34	.25	T		04	84	04	T	.05					1.18	T					22	.02				63	.49	02	20			4.32
Farmers	L															.50	.30					30					1.50		95	.64			
Hazard	K																																
Jackson	K			50	09	.26		.01	.67		.03	.07				.03	.46	.02	T.				10					T	1.19	1.11	.65	T	5.19
London	C		.40	.07	10			30		.10		.07			.02	.31	.02											60	21	11			2.31
Louisa	B		.38		20			18				15			05	.23						46						97	.45	.70			4.07
Manchester‖	K		.13	.62	.15					10		.23			37		10										.05	.63	15				2.53
Maysville‖	O		.24	.16	.09		.01	.55	T.	T.	.01	.06			T	1.59	T					23	.02	.02			08	1.79	.08	.57			5.50
Middlesboro	C		.64	T.				.99	05		.05					.08						.30						1.03	.03	.05			3.22
Mount Sterling‖	L		.40	.24				.60	T						14	.53						.33	T.				.17	70	1.41	.48			5.00
Pikeville	B		.32	.24	08			78	06	T.		T			08	42	04					.12	T.				.06	1.18	.82	.42			4.62
Richmond‖	K		.44	.13	T					.10	08			10	11	80	03					.10					.17	.50	.13	.18			2.88
Weeksbury	B		.40		.35				65	T.		.12				.58											.05	.80	1.00				3.95
Williamsburg‖	C		.40	.10	.10			.72	T.	.02		T				23	T			T	T	T		T.				95	.16				2.68

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

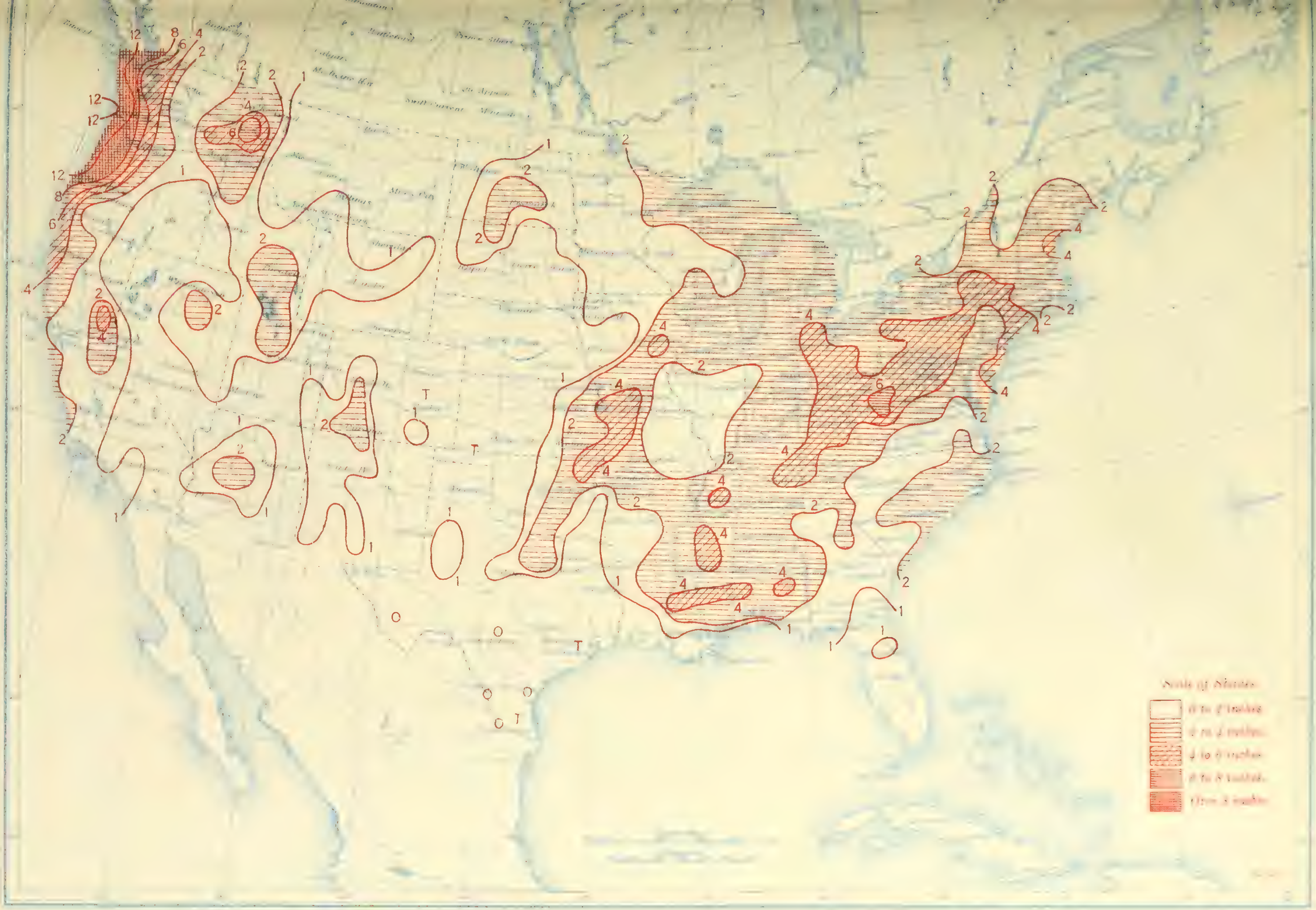
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for March, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean.
Western Division																																	
Beaver Dam §§	Maximum	43	36	31	44	60	71	61	31	48	46	47	63	76	59	31	39	49	69	53	55	76	70	53	75	75	64	51	41	57	68	74	55.4
	Minimum	23	30	22	16	31	49	34	22	19	37	24	26	47	59	24	19	26	33	33	31	43	69	26	44	60	58	41	36	38	33	36	35.1
Blandville	Maximum	34	33	33	48	61	73	69	42	51	47	45	63	76	67	34	43	54	73	55	57	79	75	54	75	74	59	51	46	59	69	72	57.1
	Minimum	26	30	23	18	34	56	41	24	26	35	24	33	53	33	25	23	31	40	38	37	50	38	27	47	57	51	37	35	42	43	49	36.3
Calhoun	Maximum	39	37	34	45	57	73	72	48	49	48	48	64	78	74	37	40	50	57	56	54	77	74	52	75	72	63	61	42	60	71	75	57.5
	Minimum	23	30	21	14	33	50	36	21	21	39	23	29	49	35	22	17	27	27	31	33	47	39	26	42	59	55	40	34	38	37	40	33.5
Earlington §§	Maximum	42	35	31	47	63	75	63	31	50	48	47	64	78	58	31	40	54	71	55	59	80	75	69	79	68	63	48	42	58	71	77	57.2
	Minimum	22	29	22	14	23	38	32	20	17	29	24	25	42	56	25	15	24	33	32	32	37	54	32	37	47	56	40	34	35	33	36	32.1
Hopkinsville	Maximum	37	38	34	47	62	74	70	57	51	49	47	64	78	70	63	57	51	72	67	61	82	74	65	80	71	62	56	44	58	63	74	60.6
	Minimum	24	31	25	16	31	64	35	23	20	37	25	28	50	36	26	21	28	37	37	35	46	44	31	69	62	56	44	40	40	37	44	36.8
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro §§	Maximum	34	34	43	54	70	68	45	47	46	43	61	75	65	38	37	48	65	48	51	74	70	49	75	65	63	55	38	59	68	73	60	55.5
	Minimum	25	26	22	15	30	49	38	21	22	33	24	29	46	34	22	19	28	33	34	34	42	38	29	41	58	54	34	35	39	38	40	33.2
Central Division																																	
Alpha	Maximum	50	38	37	41	58	65	60	42	41	45	44	55	74	65	61	36	45	68	53	60	74	70	51	75	75	66	64	40	47	63	70	55.9
	Minimum	23	37	29	15	43	58	42	26	22	44	24	37	56	61	25	15	24	53	35	33	57	41	30	57	64	64	40	38	37	34	38	38.8
Anchorage	Maximum	41	35	29	39	48	67	61	35	45	45	43	61	72	65	32	37	41	48	46	45	64	70	52	77	74	74	55	42	56	68	74	52.9
	Minimum	20	28	18	4	26	41	32	21	15	30	21	24	51	31	18	10	26	28	24	29	39	35	23	40	51	50	39	36	38	33	36	29.6
Bardstown §§	Maximum	46	37	32	44	60	68	62	34	46	47	47	61	75	59	33	39	44	68	53	52	74	72	50	78	78	75	59	42	59	71	76	56.2
	Minimum	25	28	20	12	25	34	35	25	17	35	23	25	35	50	22	16	28	29	30	31	35	53	27	32	49	59	45	37	37	34	36	31.9
Bowling Green §§	Maximum	45	34	35	37	60	72	64	30	50	51	50	71	82	63	32	45	55	73	74	66	82	71	66	76	78	67	60	50	59	74	78	59.7
	Minimum	18	32	23	12	29	38	36	21	18	21	23	27	43	53	23	17	18	28	31	28	30	62	25	39	55	54	40	34	33	34	36	31.6
Edmonton	Maximum	46	48	33	41	60	68	68	47	46	48	44	60	77	70	53	38	..	72	66	60	75	72	55	77	77	71	54	42	37	65	73	[a]58.1
	Minimum	19	33	24	14	37	49	36	23	17	37	27	27	50	52	24	16	..	24	33	31	46	39	28	43	58	53	38	35	34	32	35	[a]33.8
Eubank §§	Maximum	42	42	46	42	53	68	62	56	45	..	42	58	74	69	63	56	..	68	59	59	73	70	56	75	79	73	66	50	50	62	71	[b]59.6
	Minimum	17	25	23	8	12	40	37	22	14	22	..	21	29	48	20	12	21	..	27	28	34	54	26	26	48	57	43	36	35	31	33	[b]29.3
Frankfort	Maximum	44	44	38	43	58	72	76	50	45	47	43	59	66	66	43	35	38	59	58	50	68	70	51	78	80	76	66	57	58	65	70	57.2
	Minimum	20	30	18	10	28	40	36	23	14	33	23	26	45	36	20	12	27	27	27	29	40	40	26	41	51	57	43	38	38	34	35	31.2
Franklin	Maximum	44	42	35	40	60	71	68	45	48	51	44	61	78	69	38	40	49	73	61	61	80	73	73	76	75	64	58	45	55	65	75	58.6
	Minimum	21	32	24	16	35	56	57	22	22	33	25	30	48	35	25	19	27	36	37	32	53	39	29	46	59	56	41	36	38	38	42	35.8
Greensburg §§	Maximum	46	35	31	43	60	69	63	30	46	47	43	61	77	63	32	39	47	70	52	60	75	72	53	78	79	74	58	42	56	65	74	56.1
	Minimum	19	24	24	14	20	37	35	24	18	24	24	23	32	49	24	23	23	31	30	28	37	48	27	33	46	58	43	37	37	31	39	31.0
Irvington	Maximum	43	42	35	41	55	69	60	42	46	47	43	61	75	70	34	37	45	66	60	59	72	67	51	76	74	70	55	41	57	65	72	55.8
	Minimum	23	35	21	14	34	47	36	22	18	35	24	30	48	33	23	20	27	37	29	32	47	40	28	42	62	55	40	36	38	38	41	34.0
Leitchfield	Maximum	45	40	34	40	57	70	68	33	45	47	44	61	76	66	36	38	47	69	56	54	69	54	..	75	75	69	52	40	55	65	74	[a]55.1
	Minimum	21	30	22	14	29	44	33	20	15	37	23	25	45	36	23	18	24	30	30	34	37	26	..	40	58	52	40	35	36	35	37	[a]31.6
Lexington	Maximum	44	39	26	38	48	67	57	30	40	44	38	56	67	63	26	30	35	57	44	52	66	69	50	74	76	72	55	38	52	62	71	51.2
	Minimum	26	26	14	9	35	47	30	20	19	28	22	29	46	26	17	12	24	28	30	30	47	30	24	42	60	48	38	35	38	39	46	31.1
Loretto	Maximum	45	42	31	41	54	68	68	44	45	46	42	60	76	74	30	36	42	69	63	62	73	72	50	77	77	80	59	48	56	66	72	57.0
	Minimum	10	31	20	11	32	43	34	21	15	35	22	24	48	26	21	15	24	28	25	20	40	39	23	38	58	56	43	37	37	33	34	30.4
Louisville	Maximum	41	34	30	40	48	68	59	31	44	46	40	60	73	66	28	37	41	60	48	51	70	71	50	76	74	70	55	41	57	67	71	53.1
	Minimum	27	27	15	13	35	45	31	22	22	28	24	33	49	28	19	19	31	30	34	34	48	34	28	44	61	52	40	36	39	40	45	33.3
Do. (Cherokee Park)	Maximum	41	38	32	41	49	68	67	35	44	45	40	61	73	73	37	36	40	58	56	47	64	70	50	78	76	72	59	48	58	66	72	54.6
	Minimum	22	30	16	10	32	41	35	21	19	32	21	27	46	35	18	16	28	27	28	31	39	37	25	39	58	56	42	36	37	36	37	31.5
St. John §§	Maximum	40	35	31	39	58	67	58	32	46	45	44	59	75	56	30	40	44	40	48	54	72	68	50	76	74	70	59	42	55	60	72	52.9
	Minimum	20	27	20	11	16	34	32	23	15	23	22	23	33	47	22	15	23	29	27	30	34	50	24	32	44	57	40	36	36	36	37	29.6
Scott	Maximum	40	33	28	32	41	64	64	39	41	43	41	57	68	59	31	33	32	45	42	41	60	68	50	73	77	71	60	48	55	63	71	50.6
	Minimum	20	27	16	7	28	34	35	22	15	31	21	27	45	31	16	8	18	22	28	24	38	33	21	37	57	56	46	38	39	37	37	29.5
Shelby City	Maximum	44	42	35	40	53	68	67	45	45	45	44	59	74	71	53	40	38	69	60	54	73	72	50	77	79	74	55	44	55	63	72	56.8
	Minimum	20	31	20	6	36	36	35	23	18	35	20	22	48	52	20	12	24	27	26	25	43	40	22	48	53	55	41	36	37	36	34	31.6
Shelbyville §§	Maximum	42	34	31	40	55	66	60	27	44	44	43	60	70	57	29	36	40	58	50	49	69	68	51	76	76	73	56	43	69	67	72	53.4
	Minimum	22	28	18	6	10	30	33	22	11	22	21	25	32	49	19	12	18	26	26	28	33	45	24	29	41	57	41	37	37	32	36	28.1
Taylorsville	Maximum	43	41	31	40	50	66	67	49	44	45	41	59	73	71	33	35	39	61	51	49	69	74	48	77	75	73	56	48	56	64	69	54.7
	Minimum	21	31	20	9	27	42	34	23	18	33	23	24	42	33	20	15	27	30	26	29	43	38	25	39	52	55	43	38	38	31	33	31.0
Williamstown §§	Maximum	43	32	28	38	53	63	65	63	50	30	45	58	68	58	45	34	39	42	46	44	68	64	53	75	76	73	65	45	56	66	73	53.5
	Minimum	20	22	14	4	8	35	39	32	11	18	18	25	32	45	13	7	20	21	24	24	28	48	20	24	39	56	43	37	35	34	39	26.9
Eastern Division																																	
Beattyville §§	Maximum	46	37	30	42	61	69	65	35	48	45	48	62	67	62	27	36	46	71	52	64	75	75	55	79	84	81	58	41	52	68	76	56.7
	Minimum	17	22	30	7	10	31	41	28	17	22	18	19	24	36	21	16	18	27	27	22	27	46	24	28	41	49	44	38	38	35	34	27.6
Berea	Maximum	45	40	36	40	50	63	63	43	46	38	42	58	62	62	39	35	43	65	50	51	71	62	70	73	70	65	60	52	64	70	72	54.8
	Minimum	20	30	18	16	16	32	39	22	21	19	20	24	42	39	19	6	20	29	28	28	41	37	37	38	55	50	48	31	33	34	36	29.9
Farmers	Maximum	44	43	36	28	54	66	65	58	44	43	43	58	66	66	31	35	40	58	53	53	65	43	36	38	54	66	75	52	52	62	68	51.8
	Minimum	19	34	22	10	22	40	40	25	19	20	18	18	40	41	30	28	25	25	25	22	42	34	22	10	22	40	46	37	38	33	34	28.4
Maysville §§	Maximum	47	35	31	38	50	67	61	32	45	42	45	59	70	61	28	33	37	50	46	50	69	70	54	77	83	77	61	44	57	68	75	53.6
	Minimum	17	21	18	5	10	26	37	24	17	18	21	20	35	36	17	7	9	21	25	21	24	37	23	27	41	50	45	40	35	35	36	25.7
Middlesboro	Maximum	48	49	42	41	61	63	65	59	47	45	45	57	73	73	69	38	49	68	65	62	73	75	61	75	80	80	73	46	45	65	72	60.1
	Minimum	17	39	26	14	35	40	47	24	21	32	35	20	39	58	24	18	24	28	36	26	49	49	29	39	50	55	43	39	38	38	32	34.3
Mount Sterling §§	Maximum	45	37	27	38	54	65	59	30	42	42	56	56	62	59	25	28	34	58	44	53	66	70	50	75	80	78	58	42	52	62	68	52.1
	Minimum	20	25	19	5	15	38	36	24	16	22	21	34	39	49	17	9	13	24	24	24	32	41	22	27	48	59	43	42	37	35	34	28.8
Richmond §§	Maximum	46	35	28	39	50	68	60	36	45	42	43	58	69	60	33	33	42	66	51	58	70	71	51	75	80	79	57	40	52	66	71	54.0
	Minimum	23	33	18	8	34	46	38	35	18	40	22	32	40	50	20	11	20	32	28	30	42	55	25	35	55	58	45	37	37	36	43	33.7
Weeksbury	Maximum	37	39	38	35	33	49	63	58	47	38	33	40	50	61	23	27	34	64	50	55	61	48	48	63	70	73	56	37	43	49	58	47.7
	Minimum	22	19	17	14	11	32	40	47	24	20	31	32	37	22	21	20	16	32	26	34	45	47	27	34	49	56	33	34	36	33	35	30.5
Williamsburg §§	Maximum	50	40	33	48	59	67	66	31	48	50	47	63	79	75	30	38	48	74	74	64	78	72	61	78	81	76	73	43	48	65	74	59.1
	Minimum	24	24	31	15	15	38	45	27	24	24	25	27	21	52	24	17	20	34	41	26	35	55	28	32	60	43	41	39	38	39	32	32.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc. days missing from record.



Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
12
8
6
4
2
1
T
0

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

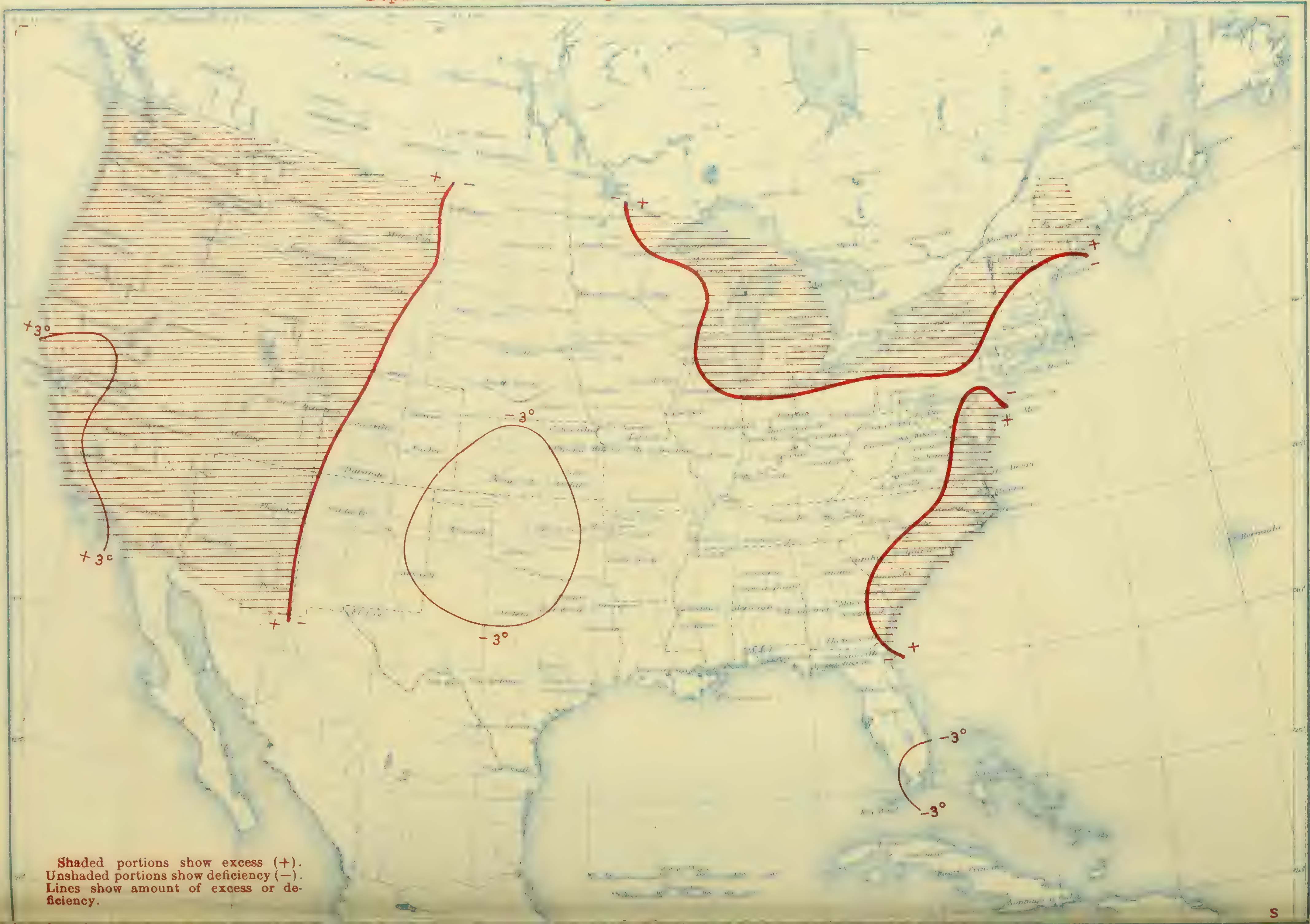
KENTUCKY SECTION

APRIL, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 22, 1916

Departure of the Mean Temperature from the Normal, April, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXI. Louisville, Ky., April, 1916. No. 4.

GENERAL SUMMARY.

The month was cool, cloudy, windy and generally unfavorable for the growth of vegetation. Minimum temperatures were unseasonably low on most days, but especially in the period 6-10th when they ranged between 23° and 37°. On the 10th temperatures were below freezing at nearly all stations in the central and eastern counties, and near freezing in the western counties, with killing frosts over all the State. Because of the backward condition of plant life only slight damage resulted from these low temperatures. At a few stations killing frosts also occurred on the 18th, but at most stations the frost on that date was light. There were a few warm days in the period 11-20th, and much outdoor work was accomplished, especially the planting of gardens. Following the rains of the 20th, however, there was a decided change to colder, and temperatures continued much below normal until the 29th.

Precipitation averaged considerably below normal, but on account of its frequency farm operations were retarded to some extent. Tobacco plants were late in coming up, gardens made but little progress, while corn planting had scarcely begun at the end of the month. Snowfall was quite heavy for April in the northern counties, occurring mostly on the 7th and 8th. At Louisville snow fell continuously from about noon of the 7th to 9 p. m. of the 8th. Thunderstorms occurred on the 16th, 20th and 28th, those of the 20th being accompanied at several places in the State by destructive winds, lightning and hail.

PRESSURE.

Three low pressure formations of marked energy passed over or near the State during the month. The first of these, centered over Texas the morning of the 1st, moved eastward across Arkansas and the Gulf States the 2-3d, its influence extending northward to the Ohio Valley. The second disturbance, centered on the middle Gulf coast the morning of the 7th, moved northward over Tennessee and Kentucky the 7-8th, attended by rain and snow. The third and most severe of the three appeared on the morning of the 19th as a deep elliptical low pressure area over Nebraska, Iowa, Kansas and western Missouri. During the next 24 hours the main center of the storm had moved to Minnesota, but a long deep trough extended from this center southward to Texas. This trough with a well defined wind shift line swept eastward over the Ohio Valley during the afternoon and night of the 20th, attended by destructive thunderstorms and wind squalls. High pressure areas dominated during the periods 4-6th, 9-12th, 14-15th, 17-18th and the 27-29th.

The mean sea-level pressure for the State, based on the records of two stations, was 30.00 inches. The extremes in pressure were 30.27 inches on the 10th and 29.65 inches on the 8th, both at Lexington.

TEMPERATURE.

The mean temperature for the State, determined from the reports of 36 stations, was 54.0°, which is 1.9° below the April normal. The monthly extremes were 89° at Beattyville on the 20th, and 23° at Williamstown on the 7th and at Farmers on the 10th.

PRECIPITATION.

The average precipitation for the State, based on the records of 47 stations, was 2.64 inches, which is 1.43 inches less than the normal amount for April. Over most of the State monthly totals ranged between 2 and 3 inches. Precipitation was lightest over the Blue Grass region, where monthly amounts ranged between 1 and 2 inches; also in Metcalfe and Christian Counties 2 inches or less occurred. Over a small area extending from Meade County southwestward to Hopkins County there was more than 4 inches. At the various stations amounts ranged between 1.01 inches at Lexington and 4.70 inches at Calhoun. Six to 7 inches of snow occurred in a few of the northern counties, but there were flurries only over the southern half of the State.

WIND.

The total wind movement at Louisville was 10,639 miles, and at Lexington 10,724 miles, with average hourly velocities of 14.8 and 14.9 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 52 miles per hour from the west on the 24th, and at Lexington 56 miles per hour from the west on the 20th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 72 per cent, at 2 p. m. 54 per cent and at 7 p. m. 66 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 52 and at Lexington 46.

MISCELLANEOUS.

April 16.—During a severe storm at Greensburg, buildings were unroofed, two mules killed by lightning, and vegetation considerably injured by hail.

April 20.—Damage estimated at $125,000 was caused in the west end of Louisville, Ky., by a heavy wind squall and hailstorm. Several persons were shocked by lightning and others were in-

(Continued on next page.)

ERRATA

March, 1916: Maysville - highest temperature should be 83 on the 25th

COMPARATIVE DATA FOR APRIL.

Year.	Temperature. Monthly average.	Temperature. Departure from 25-year normal.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Monthly average.	Precipitation. Departure from 25-year normal.	Precipitation. No. of days with .01 in. or more.
1889	57.0	+1.1	89	24	1.61	−2.46	..
1890	57.0	+1.1	92	28	4.04	−0.03	
1891	58.0	+2.1	92	24	2.52	−1.55	
1892	56.0	+0.1	88	22	7.12	+3.05	
1893	58.0	+2.1	94	21	6.99	+2.92	
1894	56.0	+0.1	94	23	3.54	−0.53	
1895	57.2	+1.3	94	22	3.18	−0.89	9
1896	63.6	+7.7	96	24	1.65	−2.42	6
1897	55.5	−0.4	90	25	6.03	+1.96	11
1898	52.4	−3.5	86	19	3.38	−0.69	9
1899	57.2	+1.3	96	20	3.16	−0.91	9
1900	56.2	+0.3	90	15	2.15	−1.92	8
1901	50.9	−5.0	91	23	4.01	−0.06	10
1902	54.2	−1.7	93	22	2.65	−1.42	9
1903	55.4	−0.5	90	22	4.43	+0.36	12
1904	50.8	−5.1	85	16	2.83	−1.24	11
1905	56.7	+0.8	91	23	3.00	−1.07	9
1906	59.5	+3.6	94	23	1.40	−2.67	6
1907	48.2	−7.7	87	19	2.78	−1.29	11
1908	59.8	+3.9	89	23	6.56	+2.49	14
1909	56.1	+0.2	96	21	5.98	+1.91	10
1910	55.4	−0.5	88	23	5.14	+1.07	14
1911	53.8	−2.1	90	20	7.06	+2.99	14
1912	58.4	+2.5	87	25	7.90	+3.83	12
1913	55.3	−0.6	89	27	2.73	−1.34	16
1914	55.7	−0.2	91	13	3.62	−0.45	10
1915	60.1	+4.2	96	17	0.96	−3.11	5
1916	54.0	−1.9	89	23	2.64	−1.43	9

Climatological data for April, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	54.7	− 0.1	82	13	29	9	34	2.29	−2.33	0.96	......	7	15	5	10	NW	W. T. Austin.
Blandville	Ballard	445	34	56.2	− 1.0	79	13	32	9	30	2.91	−1.28	1.25	0.2	10	8	12	10	NE	E. W. Horr.
Calhoun	McLean	437	12	55.6	− 3.3	82	13†	29	9	36	4.70	−0.14	2.60	T.	11	3	21	6	NW	W. A. Taylor.
Earlington	Hopkins	420	25	55.2	− 2.0	84	13†	30	9	38	4.40	+0.08	3.03	T.	6	18	1	11	SE	Brick Southworth.
Hopkinsville	Christian	524	19	56.6	− 0.2	83	19	32	9	36	1.99	−2.36	1.15	......	6	16	5	9	W	W. F. Randle.
Marion	Crittenden	571	17	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	B. C. Paris.
Owensboro	Daviess	479	18	53.5	− 1.7	80	13†	30	9	36	3.82	−0.28	2.12	1.0	7	13	6	11	NW	Henry S. Berry.
Paducah	McCracken	341	27	......	......	......	......	......	......	......	2.57	−1.48	1.16	......	7	......	......	......	......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	56.8	− 0.5	85	20	32	9	36	2.43	−2.84	0.85	T.	4	16	4	10	W	W. W. Hicks.
Anchorage	Jefferson	700	14	52.2	− 1.2	84	19	27	10	35	2.92	−1.06	1.18	7.0	8	13	5	12	SW	C. E. Barret.
Bardstown	Nelson	637	18	54.8	− 0.5	84	13†	29	10	47	2.23	−1.64	0.60	......	8	13	7	10	S	Chas. M. Talbott.
Bowling Green	Warren	500	26	55.4	− 2.5	87	30	26	9	41	2.43	−1.34	1.28	......	8	16	8	6	S	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	......	......	......	......	......	......	......	2.46	−1.49	0.90	T.	6	......	......	......	......	C. L. Hurt.
Cloverport	Breckenridge	375	2	......	......	......	......	......	......	......	4.54	......	2.80	0.8	12	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	ᵇ55.4	− 0.4	82ᵇ	13†	28	10	37	1.46	−2.94	0.50	T.	8	10	9	11	W	Miss Lee Ray.
Eubank	Pulaski	1177	21	53.0	− 0.8	84	20	26	10	48	2.19	−1.86	0.85	T.	6	6	10	14	S	Mrs. Katie Payne.
Frankfort	Franklin	560	24	55.2	+ 0.1	85	13†	26	10	35	1.81	−1.36	0.58	T.	10	10	11	9	S	Mrs. Amelia Wood
Franklin	Simpson	691	21	56.8	− 2.3	84	13	28	9	32	2.50	−2.11	1.61	T.	8	2	18	10	NW	J. E. Newman.
Greensburg	Green	581	23	54.4	− 0.6	82	13†	25	10	43	2.74	−0.92	0.65	T.	11	1	20	9	S	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	......	......	......	......	......	......	......	2.14	−2.11	0.84	1.5	8	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	54.6	− 0.5	82	19	29	9	31	3.30	−1.01	1.70	1.0	8	9	10	11	SW	W. J. Piggott.
Leitchfield	Grayson	635	20	53.8	− 1.6	83	13	28	9	36	2.96	−1.12	1.53	1.2	9	10	10	10	NE	John E. Stone.
Lexington	Fayette	989	31	52.4	− 1.3	79	20	29	9	29	1.01	−2.33	0.35	3.1	10	6	13	11	SW	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	54.0	− 0.9	82	13	27	10	35	2.26	−1.45	0.65	T.	12	7	8	15	......	Loretto Academy.
LOUISVILLE	Jefferson	525	43	54.0	− 2.2	81	19	30	9	31	3.17	−0.90	1.63	2.0	8	7	7	16	SW	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	530	6	54.1	......	82	20	29	9†	37	3.40	......	1.78	......	9	6	13	11	NW	Wm. I. Hunt.
St. John	Hardin	777	19	52.6	− 1.8	83	13	27	9†	35	3.47	−0.40	1.56	......	11	18	2	10	S	Sisters of Loretto.
Scott	Kenton	900	18	52.3	− 0.4	80	19	29	10	34	2.42	−0.81	0.59	6.2	12	5	9	16	S	E. B. Wilson.
Shelby City	Boyle	1087	21	54.4	− 0.1	83	13†	26	10	39	2.34	−1.37	0.62	......	9	14	7	9	NE	H. F. Ewing.
Shelbyville	Shelby	825	26	51.9	− 3.0	82	19	28	10	43	2.11	−0.92	0.72	6.0	8	10	7	13	SW	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	52.6	− 1.6	81	19	26	10	37	2.14	−3.09	0.47	3.1	11	9	4	17	W	E. D. Bourne.
Williamstown	Grant	943	13	51.6	0.0	82	19	23	7	39	1.66	−1.78	0.43	5.1	9	12	8	10	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	53.9	+ 0.5	89	20	25	10	48	2.25	−2.77	1.06	0.5	10	12	9	9	W	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	51.7	− 3.9	79	20†	29	10	34	3.45	−0.16	1.90	2.0	6	19	0	11	SW	C. F. Rumold.
Catlettsburg	Boyd	534	27	......	......	......	......	......	......	......	2.82	−1.83	0.94	T.	13	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	......	......	......	......	......	......	......	2.26	−0.97	0.47	T.	11	6	11	13	W	J. V. Oldham.
Farmers	Rowan	668	9	53.6	− 0.8	87	20	23	10	45	2.31	−2.19	0.75	......	7	13	1	16	E	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	2.35	......	1.08	0.5	9	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	1	......	......	......	......	......	......	......	2.29	......	1.10	......	8	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	11	......	......	......	......	......	......	......	2.25	−1.25	0.75	......	7	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	4	......	......	......	......	......	......	......	2.93	−0.42	0.96	1.0	6	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	52.8	− 0.8	85	19	26	10	40	2.86	−0.57	0.58	1.5	14	11	10	9	NW	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	56.0	− 0.2	85	13†	25	10	40	2.54	−2.25	0.85	......	7	20	7	3	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	52.6	− 0.8	85	20	26	10	35	1.79	−1.86	0.37	3.0	10	12	4	14	SW	W. R. McKee.
Pikeville	Pike	634	9	......	......	......	......	......	......	......	3.22	−0.68	1.00	T.	10	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	54.2	− 1.0	84	20	30	9	35	2.22	−1.01	0.90	0.5	9	16	5	9	S	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	2	49.8	......	75	19	26	10	35	3.05	......	0.77	......	9	19	2	9	......	O. A. Lund.
Williamsburg	Whitley	939	19	56.0	+ 0.6	87	20	26	10	45	2.53	−1.87	0.90	T	7	12	5	13	S	N. C. Jones.
State averages and extremes				54.0	......	89	20	23	7†	48	2.64	......	3.03	1.4	9	11	8	11	S	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

jured by flying debris. Greenhouses and plants were damaged by the accompanying hail, some of the hailstones measuring more than three-fourths of an inch in diameter. There was some slight, but no conclusive, evidence of tornadic action. Hail also occurred in Grayson and Breckenridge Counties.

Rivers:—At the beginning of the month the Ohio River was above flood stage from Portsmouth to Fern Bank, and from Cloverport to Evansville. A sharp fall set in on the 2d and the flood in the upper reaches subsided rapidly; but the river remained above flood stage at Cloverport until the 6th and at Evansville until the 10th, after which the decline was general. Good stages prevailed during the remainder of the month.

Daily Precipitation for April, 1916.

STATIONS.	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam ‖ G.			.30	T.		.05		.57	.20					T.		.07					.96	T.				.11						[illegible]
Blandville M.	T.	.71	.05		.22		.31	.24		.04						.05				1.25						.02	.02					2.91
Calhoun G.		.30	.34		.18		.30	.52	.04	.06				T.		T.		T.		2.60	.08			.04	T.	.24						4.70
Earlington ‖ G.			.43			.16		.60	.12												3.03					.06						4.40
Hopkinsville C.			.14			.14		.32	.14		.10										1.15											1.99
Marion O.																				1.46				T.								[illegible]
Owensboro ‖ O.		.30	.31	T.		T.		.42	.38		T.			T.		T.			T.		2.12	T.			.04	.25	T.					[illegible]
Paducah ‖ O.		.08	.60			.16		.44	.08		.05										1.16											[illegible]
Central Division.																																
Alpha C.		.60			T.		.85	T.		T.				T.		T.				.60						[illegible]						[illegible]
Anchorage O	T.		.30				.40	.33						T.						1.18	.08			.02	T.	.13	.18					[illegible]
Bardstown ‖ S		.04	.18			T.		.48	.14												.60				.05	.10	.34					[illegible]
Bowling Green ‖ G.			.20			.10		.45	.18		.05						.05				1.28				T.	.12	T.					2.43
Burnside ‖ C.								.90	.14		T.				T.		.51				.25				T.	.34	.32	T.	T.			2.46
Cloverport ‖ O.		.01	.68	T.		.04		.55	.04		.02					T.			T.		2.80	.02			.11	.21	.05	.01				4.54
Edmonton G.		.05			.11		.50	.20		.10						.23				.26	.01					T.						1.46
Eubank ‖ C.								.85	.12								.22				.27					.33	.40					2.19
Frankfort ‖ K			.27			T.		.58	.06					T.	T.		.05				.26	.03			T.	.37	.14	.03	.02			1.81
Franklin G.		.07			.25			.15		.10						.09				1.61	T.			.05		.18		T.				2.50
Greensburg ‖ G.			.12			.16		.61	.23		.02						.65				.50				.02	.28	.12		.03			2.74
High Bridge ‖ K.			.10			.03		.84	.20								.35				.07					.45	.10					2.14
Irvington O.		T.	.42		.06		.30	.45		T.				T.		T.		T.		1.70	.81			.06		.20						[illegible]
Leitchfield G.		.35			.11		.41	.12		.02						T.				1.53			.02	.07		.33						2.96
Lexington *** K.	T.	.03	.01		T.		.27	.08	.01					T.		.20				.03	T.			.01	T.	.35		.02				1.01
Loretto S.		.20		.01	.12		.01	.65		T.							.01			.51	.03			.02		.57	.10	.03				2.26
Louisville*** O.	T.	.21	.14		T.		.57	.26		T.	T.			T.		T.		T.		1.63	T.			.03	.16	.17	T.					3.17
Do. (Cherokee Park) O.		T.	.49					T.	.60					T.		.04		T.			1.78	.01			.01	.38	.03	.06				3.40
St. John ‖ S.		T.	.37			.06		.41	.20		.04										1.56	.05			.09	.30	.36	.03				3.47
Scott L.	.05	.05	.42				T.	.59	.03		T.			.07		T.		T.	.01	.11	.38			T.	.11	.58	.02	T.				2.42
Shelby City K.			.20		.05		.39	.60	.08												.23				.05	.62	.12					2.34
Shelbyville ‖ S.		T.	.13	T.				.50	.10						T.						.72	.05			T.	.30	.18	.13	T.			2.11
Taylorsville S.		.01	.10		T.		.45	.32	.01	T.		T.		T.		T.		T.		.38	.33			.01	T.	.47	.01	.05				2.14
Williamstown ‖ L.			.23					.43	.17					T.			T.				.28	.02			.03	.30	.05	.15	T.			1.66
Eastern Division.																																
Beattyville ‖ K.			.10	.02				1.06	.24	T.					.03		.08				.05				.01	.35	.31	T.				2.25
Berea K.		T.	.15				1.90	.30	.11												T.			.12		.87			T.			3.15
Catlettsburg ‖ B.			.52	.12		.04		.94	.12	T.					.02		.06					.18			.24	.18	.24	.10	.06			2.82
Falmouth ‖ L.			.30					.47	.06					.02			.12				.34	.04			.16	.36	.04	.35				2.26
Farmers L.			.10	T.				.75	.30	T.				T.			T.		T.			.15			.30	.61	.10	T.				2.31
Hazard ‖ K.																																
Jackson ‖ K.			.10	T.				1.08	.34	.02					T.						T.	.05	T.		.02	.30	.40	.04	T.			2.35
London ‖ C.		.04						1.10	.09						.02						.12	.02				.30	.60					2.29
Louisa B.			.24					.75									.14					.47				.22	.32	.11				2.25
Manchester ‖ K.				.16				.93	.96	.10					.21												.57					2.93
Maysville ‖ O.		.02	.17	.04				.57	.13			.01		T.	.02		.42				.16	.03	T.		.02	.36	.33	.58				2.86
Middlesboro C.					.18		.85	.35	.06												.71			.17			.22					2.54
Mount Sterling ‖ L.			.07	.03				.33	.21	.09											.09				.12	.37	.22	.26				1.79
Pikeville ‖ B.			.12	T.				1.00	.32								.12				.04	.46			.36	.44	.24	.12				3.22
Richmond ‖ K.		T.	.05					.90	.22								.09				.14				.15	.35	.12		.20			2.22
Weeksbury B.		.10			.05		.40	.67	.10				.05								.77				.20	.71						3.05
Williamsburg ‖ C.			.05	T.				.90	.11	T.					T.		T.				.37	T.			.05	.43	.62	T.				2.53

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

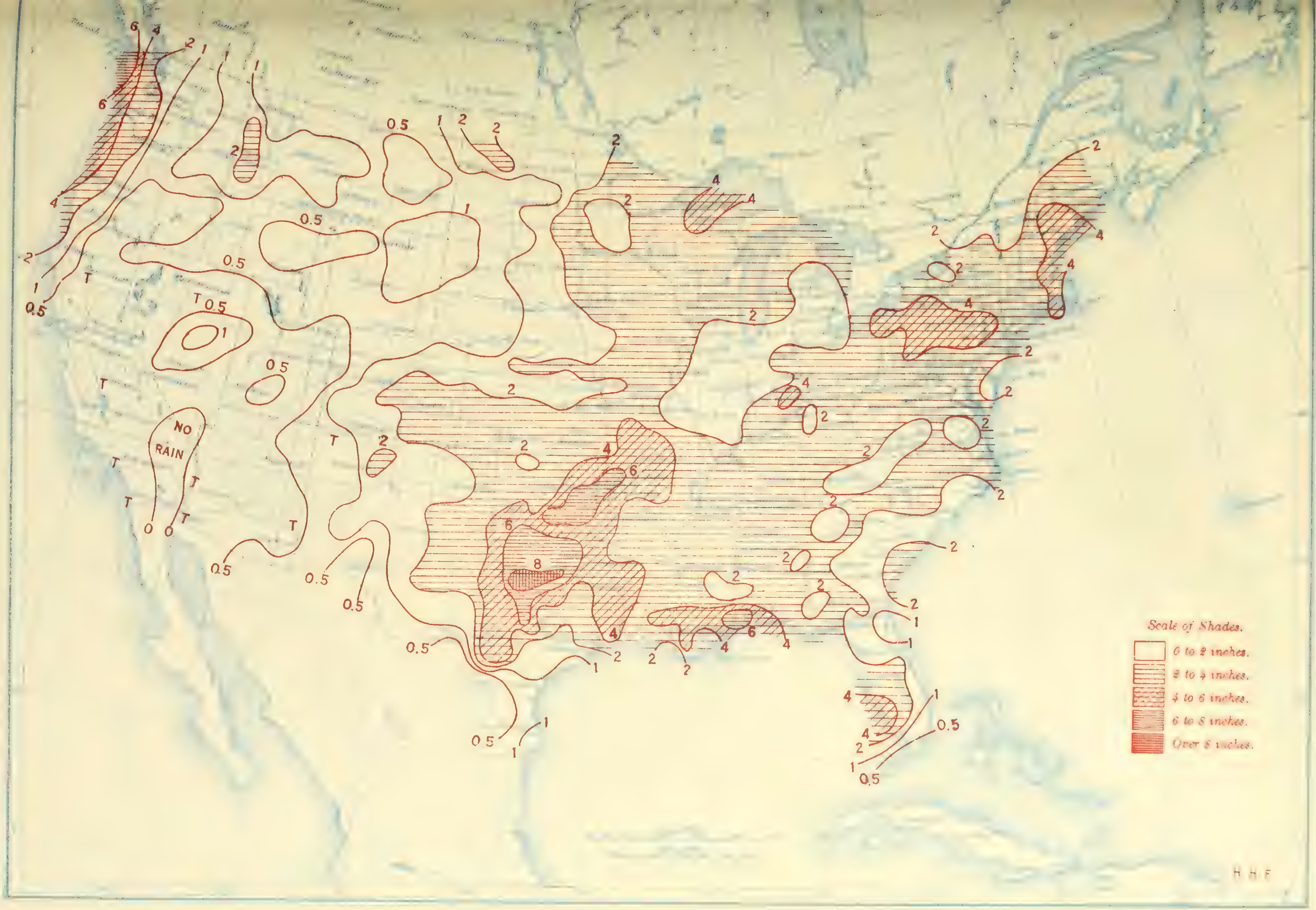
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland, (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for April, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	67	50	56	66	52	52	41	37	48	53	74	79	82	66	74	77	68	73	73	73	59	70	65	67	67	55	56	69	73	79	..	64.0
	Minimum	49	48	44	42	47	31	36	32	29	32	40	52	61	58	45	60	46	39	55	67	54	47	41	44	41	42	44	46	42	48	..	45.4
Blandville	Maximum	68	51	59	65	56	51	43	39	53	58	74	78	79	69	74	75	71	76	78	73	59	76	69	70	66	57	57	67	72	76	..	65.3
	Minimum	51	46	42	45	41	36	34	33	32	40	44	56	60	55	47	56	49	53	63	57	50	47	51	51	44	45	43	41	48	53	..	47.1
Calhoun	Maximum	66	54	57	67	60	52	49	36	49	52	75	80	82	79	74	78	72	74	82	78	59	71	69	67	67	53	57	71	75	81	..	66.2
	Minimum	52	44	42	41	40	35	33	32	29	33	39	57	61	57	41	60	47	42	56	55	47	46	42	48	43	42	42	41	51	50	..	44.9
Earlington §§	Maximum	66	49	55	67	52	52	45	37	51	53	76	81	84	68	76	77	70	77	84	71	61	72	69	69	69	53	57	72	79	81	..	65.8
	Minimum	41	47	55	41	45	31	36	33	30	33	43	51	62	57	43	48	44	41	50	64	52	47	47	48	43	43	43	39	41	43	..	44.7
Hopkinsville §§	Maximum	70	59	54	69	57	54	40	39	51	52	76	80	82	70	74	78	71	75	83	70	60	74	71	73	70	58	58	70	74	80	..	66.4
	Minimum	44	48	50	48	54	49	38	33	32	38	40	50	60	65	41	47	48	45	53	66	51	46	49	52	44	43	42	42	42	47	..	46.9
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro §§	Maximum	59	46	57	63	52	49	45	35	48	49	74	78	80	63	72	75	66	70	80	72	57	67	63	65	65	54	56	68	73	73	..	62.5
	Minimum	50	42	44	41	48	35	35	32	30	33	38	49	58	53	43	48	46	42	52	63	52	46	41	46	43	44	43	43	44	50	..	44.5
Central Division																																	
Alpha	Maximum	76	62	58	60	58	58	38	40	40	55	68	75	82	66	78	74	68	72	78	85	69	65	70	69	63	51	52	60	73	78	..	64.7
	Minimum	62	58	46	50	46	35	37	34	32	37	49	58	66	58	42	66	52	40	64	69	59	47	54	49	46	40	46	39	40	42	..	48.8
Anchorage	Maximum	68	58	58	64	54	47	42	35	45	55	72	79	79	69	64	78	65	68	84	73	61	64	..	64	64	49	57	68	72	78	..	63.2
	Minimum	45	43	41	42	37	31	30	32	29	27	37	51	61	47	37	47	38	34	51	55	44	43	..	42	37	43	43	38	40	46	..	41.1
Bardstown §§	Maximum	74	54	57	64	54	54	41	36	48	56	74	80	84	69	73	78	69	76	84	80	64	65	69	69	66	51	55	70	74	83	..	65.7
	Minimum	47	45	44	43	45	32	33	32	31	29	37	48	55	62	41	49	48	38	50	65	58	45	41	45	40	42	45	39	43	49	..	44.0
Bowling Green §§	Maximum	77	66	55	69	56	59	39	38	50	56	77	82	86	72	73	70	72	75	85	84	63	75	78	73	72	59	57	73	82	87	..	68.7
	Minimum	43	43	42	40	44	30	33	31	26	27	36	48	50	57	40	40	40	39	47	62	54	44	45	49	40	42	42	41	41	50	..	42.2
Edmonton	Maximum	76	54	67	..	63	57	49	39	46	54	71	77	82	77	75	75	65	72	81	82	..	70	69	69	66	57	52	67	73	79	..	66.6
	Minimum	41	48	45	..	43	30	35	32	29	28	38	52	60	52	53	54	49	51	47	57	..	45	55	48	40	41	45	41	38	42	..	44.2
Eubank §§	Maximum	75	63	68	62	59	55	49	41	44	55	69	78	80	68	72	75	68	70	81	84	74	68	65	69	69	56	50	64	71	79	..	66.0
	Minimum	44	46	44	45	44	30	30	34	30	26	30	42	55	60	38	43	49	33	36	48	48	43	43	40	41	38	38	36	38	31	..	39.9
Frankfort	Maximum	72	62	59	62	63	57	52	40	44	60	71	80	85	83	65	78	81	69	85	84	74	68	69	67	66	67	57	69	72	78	..	68.0
	Minimum	43	41	42	43	44	34	32	32	31	26	39	50	61	53	41	49	48	35	50	65	46	43	40	40	41	42	42	40	40	43	..	42.5
Franklin	Maximum	78	58	56	67	55	55	45	40	48	55	72	80	84	69	75	77	72	74	82	79	63	71	69	72	68	59	55	65	76	82	..	66.7
	Minimum	53	49	45	46	41	34	36	33	28	34	43	56	60	51	43	61	49	47	58	56	48	46	50	52	52	44	42	45	46	55	..	46.8
Greensburg §§	Maximum	77	53	64	66	55	56	40	37	37	53	72	79	82	69	74	77	68	71	82	82	67	70	68	70	67	58	54	66	78	79	..	65.7
	Minimum	34	47	46	45	47	30	35	35	30	25	33	45	60	63	40	50	48	37	47	57	56	45	47	46	39	42	45	39	37	42	..	43.1
Irvington	Maximum	66	51	54	64	58	52	50	47	47	54	72	78	81	70	69	77	70	68	82	75	60	65	64	65	64	56	56	66	72	76	..	64.3
	Minimum	50	45	43	43	41	37	34	33	29	34	42	56	60	52	42	57	48	41	54	60	45	43	43	46	42	43	44	46	45	45	..	44.8
Leitchfield	Maximum	71	50	55	65	60	51	40	35	47	54	73	79	83	70	73	77	66	72	82	76	60	68	66	67	67	56	54	67	73	78	..	64.5
	Minimum	46	45	43	40	39	32	33	32	28	30	37	50	56	52	41	56	47	39	55	57	45	43	43	47	41	41	42	41	41	49	..	43.0
Lexington	Maximum	71	54	53	60	54	48	40	42	39	52	69	76	79	64	64	72	61	65	79	79	60	61	58	61	60	47	51	63	69	77	..	60.9
	Minimum	48	44	42	45	40	32	31	30	29	32	40	56	60	43	40	57	48	47	52	57	43	43	40	44	42	40	42	43	50	55	..	43.8
Loretto	Maximum	74	58	58	63	63	53	48	40	46	55	72	79	82	73	69	76	70	68	81	80	79	66	66	68	65	59	53	67	72	77	..	66.0
	Minimum	45	43	40	41	40	30	32	32	30	27	40	51	63	55	38	52	47	33	47	64	47	44	41	44	39	41	41	37	37	43	..	42.1
Louisville	Maximum	67	52	52	63	54	48	42	34	45	52	73	78	80	68	64	76	64	67	81	72	59	65	66	63	64	49	57	68	71	78	..	62.4
	Minimum	48	44	43	47	41	36	33	32	30	36	42	59	63	48	43	56	50	46	52	56	44	44	44	46	43	44	43	48	49	55	..	45.5
Do. (Cherokee Park)	Maximum	71	53	52	64	63	50	48	35	46	55	75	81	81	78	64	78	76	68	81	82	61	65	65	64	64	62	55	67	72	79	..	65.2
	Minimum	49	44	41	43	42	35	31	30	29	29	38	54	61	51	38	52	47	38	49	59	46	43	40	44	39	43	43	44	42	46	..	43.0
St. John §§	Maximum	70	52	53	66	50	50	38	37	48	53	68	78	83	67	69	76	69	68	80	75	60	67	67	69	66	54	55	65	73	76	..	63.4
	Minimum	44	41	43	39	43	32	33	32	27	27	34	43	57	59	40	45	44	36	45	58	54	14	39	45	38	42	43	44	40	46	..	41.9
Scott	Maximum	67	50	47	63	65	45	43	39	40	55	72	76	79	72	64	76	67	64	80	75	62	53	58	57	62	52	60	63	72	75	..	61.8
	Minimum	48	43	40	44	40	37	31	31	30	29	38	54	62	49	37	50	54	39	47	59	46	42	38	42	41	41	42	41	43	47	..	42.8
Shelby City	Maximum	76	60	62	65	58	54	47	37	45	55	71	78	83	77	68	75	72	69	82	83	79	69	67	68	68	59	52	66	73	79	..	66.6
	Minimum	40	45	43	46	36	35	31	32	30	26	39	55	63	54	38	51	48	33	43	63	48	43	40	43	42	39	43	41	38	41	..	42.3
Shelbyville §§	Maximum	70	54	54	64	55	50	35	35	46	57	77	78	80	65	66	76	66	69	82	71	60	64	64	67	64	47	55	69	74	77	..	63.0
	Minimum	44	44	41	41	42	31	30	32	30	28	34	42	53	57	38	42	43	34	45	55	55	42	39	42	36	41	42	38	40	42	..	40.8
Taylorsville	Maximum	72	54	53	62	54	47	44	35	44	55	72	79	80	73	66	77	72	67	81	76	60	64	62	66	64	50	54	63	71	77	..	63.1
	Minimum	42	47	44	42	42	32	30	32	30	26	35	47	59	53	38	54	48	34	50	60	46	44	37	50	39	42	44	39	38	43	..	42.2
Williamstown §§	Maximum	70	52	50	63	56	48	42	43	41	57	72	78	79	60	64	77	64	66	82	75	62	56	61	63	63	52	59	69	74	78	..	62.5
	Minimum	50	42	39	39	40	34	23	31	27	29	33	42	55	52	34	44	45	40	45	50	55	42	36	41	40	40	40	39	43	49	..	40.6
Eastern Division																																	
Beattyville §§	Maximum	80	54	75	65	56	59	41	41	43	60	74	82	84	68	71	80	68	73	86	89	73	70	66	73	69	54	51	69	77	83	..	67.8
	Minimum	36	40	44	46	41	33	30	33	31	25	28	43	49	53	35	44	51	31	38	49	57	45	38	38	45	39	39	44	38	37	..	40.0
Berea	Maximum	55	50	52	56	50	45	39	36	37	49	55	72	72	75	75	69	69	58	75	79	79	59	59	54	59	59	54	56	59	72	..	59.3
	Minimum	50	46	44	42	42	33	32	31	30	29	40	55	63	54	54	54	49	35	50	67	48	49	41	39	44	44	41	40	38	38	..	44.1
Farmers	Maximum	62	61	65	63	58	56	48	38	40	56	70	76	80	76	65	80	73	68	85	87	82	58	62	68	64	59	54	67	72	81	..	65.8
	Minimum	42	43	44	48	44	30	33	33	31	23	34	40	59	55	33	47	52	31	47	63	51	44	34	36	45	40	43	44	37	36	..	41.4
Maysville §§	Maximum	71	56	54	65	56	58	44	36	41	57	74	81	81	65	69	79	66	68	85	84	70	58	61	64	65	54	61	68	74	80	..	64.9
	Minimum	37	44	41	41	40	34	28	31	30	26	34	42	50	60	35	39	49	35	46	55	57	41	38	41	41	41	42	40	40	40	..	40.6
Middlesboro	Maximum	75	72	68	63	64	62	55	44	41	55	68	79	85	79	75	74	67	73	81	85	81	69	70	69	65	61	54	64	71	77	..	68.2
	Minimum	36	44	49	53	42	40	35	36	32	25	40	45	54	54	40	50	56	33	56	60	56	45	47	40	46	40	42	47	36	37	..	43.9
Mount Sterling §§	Maximum	76	55	63	61	55	49	40	39	40	55	70	78	82	63	64	79	63	68	82	85	68	63	60	67	64	52	54	66	70	78	..	63.6
	Minimum	41	45	42	44	44	33	29	32	30	26	35	45	55	60	36	44	48	33	48	58	55	43	37	37	44	39	41	40	39	42	..	41.5
Richmond §§	Maximum	76	53	65	61	53	54	39	36	41	66	70	77	81	65	70	72	66	72	83	84	64	65	65	67	64	52	52	68	73	79	..	64.4
	Minimum	50	45	43	45	45	34	31	33	30	31	42	50	60	58	39	50	49	38	50	63	57	43	39	43	43	40	40	43	43	47	..	44.1
Weeksbury	Maximum	64	58	60	55	44	49	36	35	40	46	67	72	62	67	69	70	58	58	75	74	65	60	58	58	55	50	47	58	60	70	..	58.0
	Minimum	51	47	45	44	42	36	31	34	35	26	36	58	58	37	40	50	55	36	40	40	35	44	43	40	38	40	39	46	39	45	..	41.7
Williamsburg §§	Maximum	79	63	68	63	60	58	48	41	43	57	73	82	84	73	78	72	67	78	83	87	73	72	69	72	66	55	53	66	75	80	..	67.9
	Minimum	39	48	18	50	43	36	38	38	35	26	34	48	59	61	40	56	52	33	43	58	57	47	48	43	46	39	39	43	38	40	..	44.2

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
H H F

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

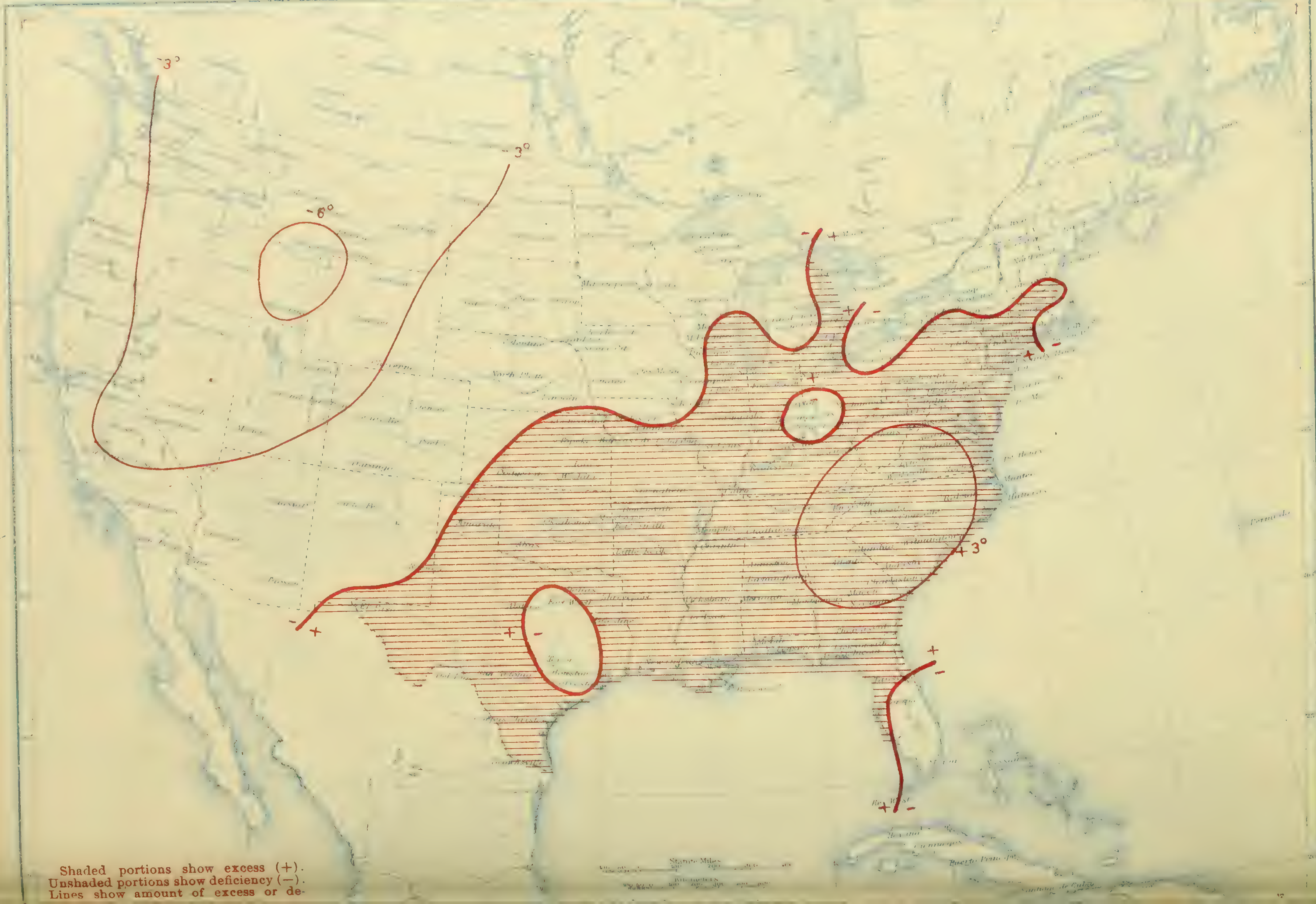
KENTUCKY SECTION

MAY, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 22, 1916

Departure of the Mean Temperature from the Normal, May, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXI. LOUISVILLE, KY., MAY, 1916. No. 5.

GENERAL SUMMARY.

While weather conditions during May were favorable for farm work in the western counties, preparation of the soil and the planting and germination of corn were hindered by insufficient rainfall in the eastern counties, where the ground became hard and unworkable. Although the temperature averaged above normal, the cool nights of the first two decades and unseasonably low temperatures near the middle of the month held in check the growth of most crops. During the last decade the weather was warm and moisture abundant, and vegetation made rapid progress. The cool rainy weather at the beginning of the month delayed farm work in some sections, but from the 5th to 15th conditions were more favorable and much of the corn crop was planted. Unseasonably cool weather prevailed in the period 16-20th, minimum temperatures on the 19th ranging between 34° and 37° at many stations in the eastern and northern counties, with damaging frosts in some localities. There was a change to warmer on the 21st, followed by good showers generally over the State. Although tobacco plants were somewhat late, transplanting was begun in the southwestern counties following the showers of the 22d.

Good rains occurred generally on the 29th and 30th, effectually relieving the droughty conditions prevailing in the eastern counties. These rains also facilitated the transplanting of tobacco, which proceeded rapidly in all localities where this crop is cultivated. Gardens made only fair progress during the month, growth being retarded by the cool weather.

PRESSURE.

The more important pressure formations passing over or near the State, and influencing weather conditions during the month occurred as follows: Low pressure areas; 1st, 3d, 7-8th, 10th, 14th-15th, 21st-22d and 29th. Of these formations the one of the 29th was most significant, on account of causing heavy rains and severe thunderstorms over a large area of the State. High pressure areas dominated on the 9th, 18th-19th and 30th-31st.

The mean sea-level pressure, based on the records of two stations was 29.96 inches. The highest was 30.24 inches on the 12th at Lexington, and the lowest 29.65 inches on the 29th at Louisville.

TEMPERATURE.

The mean temperature for the State, based on the reports of 36 stations, was 67.2°, which is 1.5° above the normal for May. The monthly extremes were 98° on the 28th at Frankfort, and 33° on the 19th at Maysville. There were only a few days during the first three weeks with maximum temperature of 90° or over in any part of the State, but maxima of 90° or above were the rule during the last week.

PRECIPITATION.

The average precipitation for the State, as computed from the records of 48 stations, was 4.02 inches, which is only slightly above normal. Of this amount, however, practically half occurred on the 29-30th. Precipitation before that date occurred as light to moderate showers, and was generally deficient. Over the south-central and extreme western counties monthly totals ranged between 4 and 6 inches, and over the northern counties between 3 and 4 inches. In the southern mountain counties less than 3 inches occurred. At the various stations amounts ranged between 2.07 inches at Manchester, and 7.15 inches at Franklin. The principal rain periods were: 2-3d; 15-16th; 22d, and 29-30th.

WIND.

The total wind movement at Louisville was 9,109 miles, and at Lexington 9,850 miles, with average hourly velocities of 12.2 and 13.2 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 50 miles per hour from the west on the 27th, and at Lexington 48 miles per hour from the southwest on the 1st.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 68 per cent, at 2 p. m. 46 per cent and at 7 p. m. 53 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 64 and at Lexington 58.

MISCELLANEOUS.

May 27.—A windstorm caused considerable damage to shade trees and some damage to residences in Louisville and vicinity. A child was injured by a falling ladder, blown down by the wind.

May 29.—Thunderstorms attended by destructive winds, hail and heavy rains occurred at many places in the State. Considerable damage was caused by wind in Louisville and vicinity, and two persons were killed by lightning, while two others were killed in accidents apparently due to the storm. Wind and hail caused extensive damage at Madisonville and in Hopkins County, where losses amounted to several thousand dollars. Many buildings were blown down, much timber destroyed and electric lines generally paralyzed. It is reported that hail fell for thirty minutes at Madisonville. Hail also caused much damage in the vicinity of Franklin, Carlisle and Central City, and telephone lines were blown down near Whitesburg.

May 30.—Two barns were burned by lightning near Bowling Green, with the loss of three horses. A young woman was shocked by lightning near Browning, Warren County.

Rivers.—In the Ohio River there was a more or less constant decline in stage during the month, and after the middle of the month the dams were used to maintain a good boating stage. Streams in the eastern part of the State ran very low by the end of the month.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.		
	Monthly average	Departure from 25-year normal.	Highest.	Lowest.	Monthly average	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	63.6	−2.1	94	28	4.03	+0.11	
1890	63.9	−1.8	93	32	4.22	+0.30	
1891	62.6	−3.1	90	29	1.78	−2.14	
1892	64.6	−1.1	90	36	5.49	+1.57	
1893	63.2	−2.5	96	37	5.59	+1.67	
1894	64.5	−1.2	99	32	3.54	−0.38	
1895	63.9	−1.8	99	29	3.16	−0.76	8
1896	72.2	+6.5	106	42	5.34	+1.42	11
1897	61.4	−4.3	92	32	3.27	−0.65	10
1898	67.6	+1.9	93	31	4.52	+0.60	10
1899	68.8	+3.1	94	42	4.79	+0.87	11
1900	66.3	+0.6	96	29	3.49	−0.43	10
1901	63.7	−2.0	97	34	2.65	−1.27	10
1902	70.0	+4.3	98	35	3.55	−0.37	9
1903	68.0	+2.3	98	29	3.09	−0.83	8
1904	65.0	−0.7	98	33	3.05	−0.87	10
1905	68.0	+2.3	95	38	5.23	+1.31	11
1906	69.5	+3.8	95	31	2.54	−1.38	9
1907	61.3	−4.4	93	30	5.07	+1.15	12
1908	66.7	+1.0	96	28	4.34	+0.42	12
1909	63.9	−1.8	93	27	4.64	+0.72	12
1910	61.1	−4.6	89	30	4.81	+0.89	12
1911	69.4	+3.7	105	29	2.46	−1.46	5
1912	66.7	+1.0	97	37	4.53	+0.61	10
1913	66.1	+0.4	99	29	2.92	−1.00	8
1914	66.5	+0.8	103	32	2.16	−1.76	5
1915	65.2	−0.5	95	35	6.62	+2.70	15
1916	67.2	+1.5	98	33	4.02	+0.10	9

Climatological data for May, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	68.0	+ 2.0	90	26†	41	19	37	4.41	+0.54	1.51	0	8	19	7	5	s.	W. T. Austin.
Blandville	Ballard	445	34	69.4	+ 2.9	89	13†	48	2†	32	5.11	+0.58	1.25	0	10	11	14	6	sw.	E. W. Horr.
Calhoun	McLean	437	12	69.2	+ 1.6	92	26	41	19	35	4.17	+0.80	1.17	0	9	7	17	7	sw.	W. A. Taylor.
Earlington	Hopkins	420	25	69.6	+ 0.8	95	26	41	19	43	3.52	−1.49	1.15	0	7	21	2	8	s.	Brick Southworth.
Hopkinsville	Christian	524	19	69.4	+ 1.8	92	10	44	17†	34	3.94	−0.29	1.00	0	7	16	3	12	w.	W. F. Randle.
Marion	Crittenden	571	17	68.6	+ 1.5	90	13†	47	2†	38	4.02	−0.27	1.35	0	7	11	16	4	sw.	B. C. Paris.
Owensboro	Daviess	479	18	67.0	+ 0.7	88	26	43	19	32	3.89	+0.05	0.90	0	10	9	7	15	s.	Henry S. Berry.
Paducah	McCracken	341	27	......	......	......	......	......	......	......	5.30	+1.33	1.56	0	10	......	......	......	......	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	68.0	+ 1.4	88	10†	41	17†	31	5.15	+1.27	2.75	0	7	12	8	11	s.	W. W. Hicks.
Anchorage	Jefferson	700	14	^{a}66.8	+ 2.4	92^{a}	26	36^{a}	19	36^{a}	2.92	−0.81	1.52	0	6	22	5	4	sw.	C. E. Barret.
Bardstown	Nelson	637	18	69.0	+ 2.0	94	26	40	19	38	3.61	+0.08	0.91	0	9	12	9	10	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	69.8	+ 2.2	97	25†	43	19	44	5.42	+1.34	2.00	0	8	14	11	6	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	......	......	......	......	......	......	......	3.48	−0.59	1.92	0	6	......	......	......	......	C. L. Hurt.
Cloverport	Breckenridge	375	2	......	......	......	......	......	......	......	3.97	......	0.83	0	10	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	^{b}66.9	+ 1.9	92^{b}	27	40^{c}	16†	42	6.30	+1.88	3.15	0	8	12	11	8	s.	Miss Lee Ray.
Eubank	Pulaski	1177	21	65.6	+ 1.4	89	14†	34	19	43	4.28	+0.33	2.09	0	11	11	8	12	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	68.8	+ 3.9	98	28	37	19	41	3.50	−0.32	1.10	0	8	13	9	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	69.0	+ 2.0	90	10†	46	17	33	7.15	+3.10	2.32	0	10	3	24	4	sw.	J. E. Newman.
Greensburg	Green	581	23	66.8	+ 1.9	92	27	37	19	40	4.59	+0.67	1.83	0	9	0	20	11	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	......	......	......	......	......	......	......	2.58	−1.24	1.03	0	7	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	67.7	+ 1.1	89	14†	41	19	33	2.71	−0.90	0.64	0	8	20	5	6	sw.	W. J. Piggott.
Leitchfield	Grayson	635	20	67.2	+ 1.7	89	10	41	19	36	6.57	+2.57	1.94	0	8	13	13	5	sw.	John E. Stone.
Lexington	Fayette	989	31	67.0	+ 2.7	89	26	44	17	30	2.92	−0.60	1.07	0	8	13	11	7	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	66.8	+ 1.1	90	26†	34	19	41	3.45	−0.33	0.95	0	12	13	10	8	......	Loretto Academy.
LOUISVILLE	Jefferson	525	43	68.0	+ 1.3	90	26	47	19	30	3.39	−0.25	1.58	0	9	10	11	10	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	6	66.9	......	89	10†	38	19	37	3.93	......	1.06	0	11	8	17	6	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	66.1	+ 1.4	89	27	37	19	37	3.68	−0.30	1.05	0	9	17	2	12	......	Sisters of Loretto.
Scott	Kenton	900	18	65.2	+ 1.0	89	26	34	19	37	3.85	−0.26	1.40	0	12	7	15	9	s.	E. B. Wilson.
Shelby City	Boyle	1087	21	67.4	+ 2.9	90	14†	36	19	42	4.56	+0.81	1.65	0	8	20	6	5	sw.	H. F. Ewing.
Shelbyville	Shelby	825	26	65.4	+ 0.4	92	14	37	19	41	4.70	+0.69	1.62	0	9	14	5	12	sw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	66.4	+ 1.4	92	25†	34	19	40	3.58	+0.11	0.91	0	7	11	11	9	s.	E. D. Bourne.
Williamstown	Grant	943	13	65.4	+ 2.0	90	14†	40	19	40	3.15	−0.11	1.15	0	8	12	7	12	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	66.9	+ 2.8	95	26	35	19	52	4.58	+0.40	1.96	0	9	13	11	7	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	63.6	− 2.2	83	13	40	17	33	4.45	+0.47	1.35	0	7	21	1	9	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	......	......	......	......	......	......	......	3.86	+0.40	0.96	0	14	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	......	......	......	......	......	......	......	3.80	+0.22	1.29	0	9	13	7	11	s.	J. V. Oldham.
Farmers	Rowan	668	9	......	......	......	......	......	......	......	4.43	+0.37	1.33	0	7	19	4	8	w.	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	2.68	......	1.07	0	8	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	1	......	......	......	......	......	......	......	4.14	......	1.95	0	11	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	11	......	......	......	......	......	......	......	3.87	−0.65	0.88	0	11	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	4	......	......	......	......	......	......	......	2.07	......	0.93	0	7	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	65.6	+ 0.5	94	26	33	19	47	3.18	−0.87	0.80	0	11	17	7	7	nw.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	66.4	+ 1.7	90	12†	39	17	47	4.45	+0.24	2.18	0	7	18	12	1	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	66.0	+ 2.1	91	14†	35	19	43	3.89	−0.16	1.46	0	10	16	4	11	sw.	W. R. McKee.
Pikeville	Pike	634	9	......	......	......	......	......	......	......	2.84	+0.08	0.92	0	10	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	68.4	+ 2.9	91	14†	42	19	35	3.50	−0.04	1.51	0	8	15	9	7	w.	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	2	61.9	......	81	10	38	19	35	2.61	......	0.71	0	6	22	1	8	......	O. A. Lund.
Williamsburg	Whitley	939	19	68.0	− 1.7	95	28	39	17	48	4.83	+0.75	2.68	0	9	16	4	11	s.	N. C. Jones.
State averages and extremes				67.2	......	98	28	33	19	52	4.02	......	3.15	0	9	14	9	8	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Daily Precipitation for May, 1916.

STATIONS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																
Beaver Dam‖ G.		.18	.23	.14									T.		.76	1.16					.38	.05							1.51			4.41
Blandville M.	.18	.41	1.25								.03				.74	.36	T.	.04			1.10								.02	.98		5.11
Calhoun G.		.34	.47					T.			T.		.02		1.17	.32					.37	.33						T.	.23	.92		4.17
Earlington‖ G.		.02	.15	.50							T.	T.			.63	.49						.58	T.							1.15		3.52
Hopkinsville C.		.26	.84	.09											.38	1.00						.50								.87		3.94
Marion O.		.40	.62												.75	.13					.62	.15								1.35		4.02
Owensboro O.		.22	.27	.29				T.				T.	.50		.40	.70	T.					.90	T.					.05	.35	.21		3.89
Paducah‖ O.		.44	.80	.50								.06			.60	.22		.04			.60	.48								1.56		5.30
Central Division.																																
Alpha C.		T.	.92								T.				T.	.10	.06	T.			T.	.60	.12						2.75	.60		5.15
Anchorage O.		.33	.33	.04																		.35					T.		1.52	.35		2.92
Bardstown‖ S.		.20	.26	.78									T.		.10	.30						.28	.38						.40	.91		3.61
Bowling Green‡ G.		.05	.80	.40								T.				1.25		.12				.70	T.						.10	2.00		5.42
Burnside‖ C.			.22	.67								T.				T.	T.	.06	T.			.50	.11	T.						1.92	T.	3.48
Cloverport‡ O.		.24	.31	.13		T.							T.	.10	.71	.53	T.					.83	.02						.31	.79		3.97
Edmonton G.		.30	1.40												.30	.23		T.			.06	.56							.30	3.15		6.30
Eubank‖ C.			.28	.07												.02	.03	.03				.38	.45	.02					.15	2.09	.13	4.28
Frankfort‖ K.		.20	.22	.59												.09	T.	T.				.40	.10						.80	1.10	T.	3.50
Franklin G.		.42	.66					T.			.08				1.40		.21	T.			.21	1.15	.14						.56	2.32		7.15
Greensburg‖ G.		.18	.65	.40												.11	.14	T.				.39	.04						.85	1.83		4.59
High Bridge‖ K.		.10	.43	.44																		.38	.10						.10	1.03		2.58
Irvington O.		.59	.18									T.			.64	.36						.26					.16		.36	.16		2.71
Leitchfield G.		.50	.75								T.		.05		1.25	.22	.02				T.	1.94							1.84			6.57
Lexington *** K.		.22	.82	T.											T.	.02	T.				.12	.57	.06						.97	.14	T.	2.92
Loretto S.		.49	.65	.02							T.				.15	.01	.06				.02	.21	.01						.95	.86	.02	3.45
Louisville*** O.		.39	.17	.05							T.	T.	T.		.40	.19	T.				T.	.57					.04	T.	1.31	.27		3.39
Do (Cherokee Park) O.		.36	.22	.07											.35	.14	.03					.44					.18	T.	1.02	1.06	.06	3.93
St. John S.		.12	.32	.36											.03	1.05						.42	.24						.54	.60		3.68
Scott L.		.24	.49				.10					.02			T.	.05	.01	.02			T.	.79					.03	.02	1.40	.68		3.85
Shelby City K.		.34	.45	.35											.03	.10	T.					.96	1.65							.68		4.56
Shelbyville‖ S.		.13	.25	.41											T.	.20	.04	T.				.23	1.22						.60	1.62		4.70
Taylorsville S.	T.	.34	.44					T.			T.				.25	.23	T.				T.	.53					T.		.88	.91		3.58
Williamstown‖ L.		T.	.32	.25		T.	.13									.08	T.					.38	.37						.47	1.15		3.15
Eastern Division.																																
Beattyville‖ K.		T.	.13	1.09		.05					.09	T.					T.	T.				.30	.10					T.	.36	1.96	.50	4.58
Berea K.		.10	.28	1.35							.12						T.					.31						T.	1.10	1.19		4.45
Catlettsburg‖ B.			.16	.96		.14	.74		.14							.04	.06	.04				.08	.76	.06					.16	.46	.06	3.86
Falmouth‖ L.		.06	.28	.24			.13									T.	.06					.61	.39						.74	1.29		3.80
Farmers L.			.15	1.33	.55		.15																.60	.40						1.25		4.43
Hazard‖ K.																																
Jackson‖ K.			.08	.72	T.	.17						T.										.30	.20	.05					T.	1.07	.09	2.68
London‖ C.			.10	.08												.32	.15	.07				.40	.42	.09					.34	1.95	.22	4.14
Louisa B.			.17	.88		.16	.60									.44	.05					.07	.37					.40		.66	.07	3.87
Manchester‖ K.				.14													.18					.11	.32						.37	.93	.02	2.07
Maysville‖ O.		.01	.47	.48		T.	.16									.01	.08	T.				.34	.37	.01					.80	.45	T.	3.18
Middlesboro C.				.16												.01	.04					1.13	.88					.05		2.18		4.45
Mount Sterling‖ L.		T.	.32	.54	T.		.14									T.	.03					.40	.51	.14				T.	.33	1.46	.02	3.89
Pikeville‖ B.				.12		.16		.32									.12	.04				.24	.44				.06		.92	.42		2.84
Richmond‖ K.			.25	.83													.03	T.				.27	.42						.09	1.51	.10	3.50
Weeksbury B.															T.	.10	T.					.46	.29					.71	.60	.45		2.61
Williamsburg‖ C.			.11	.16								T.				.24	.07	T.	T.			.65	.38	T.					.11	2.68	.43	4.83

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

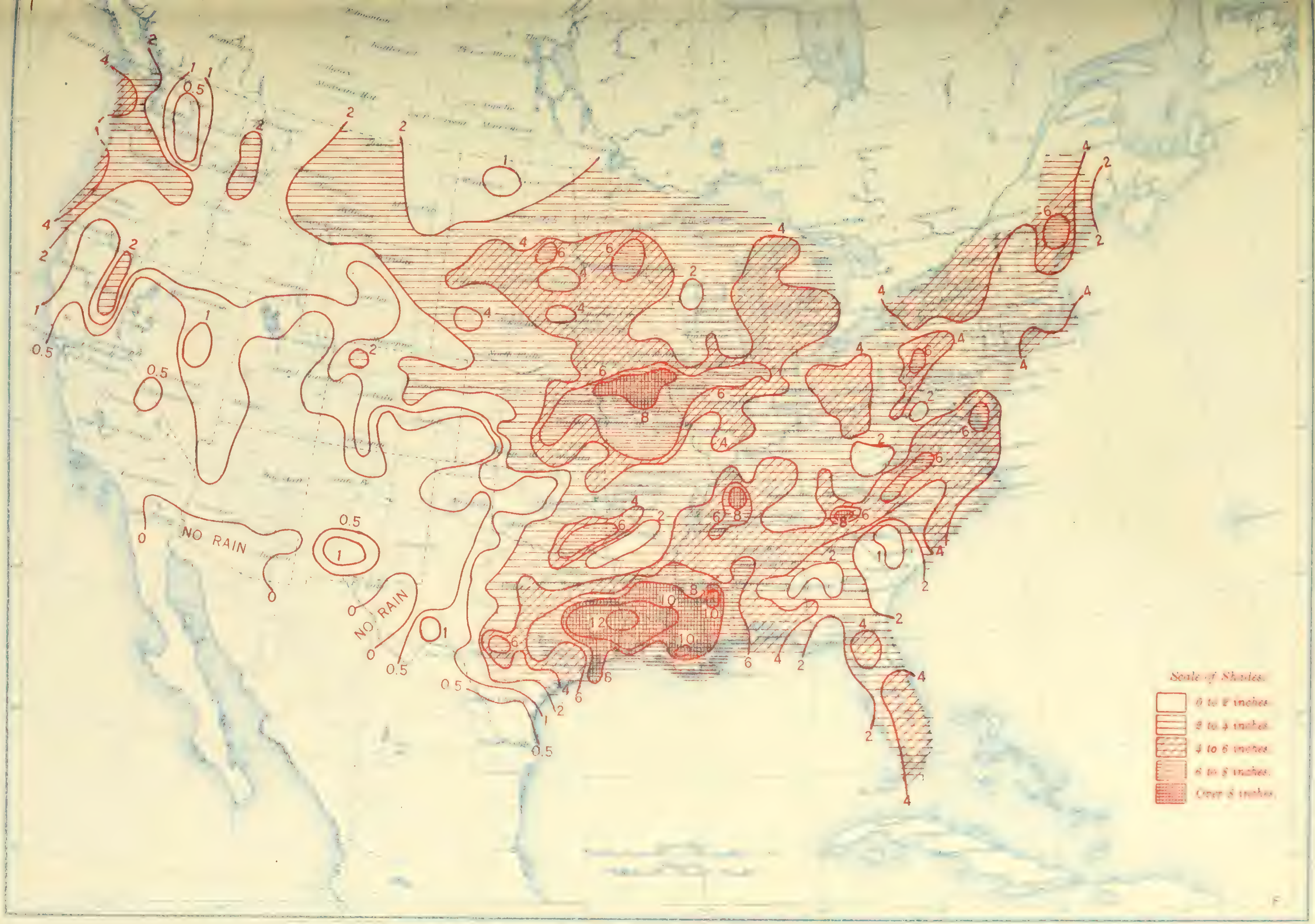
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for May, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	77	63	65	64	79	85	85	84	81	89	73	78	88	89	69	67	71	67	73	80	77	78	83	87	89	90	90	88	89	76	77	79.1
	Minimum	60	52	52	45	49	48	65	63	48	52	59	50	56	70	62	54	45	52	41	49	60	62	62	58	61	65	70	67	68	64	55	56.9
Blandville	Maximum	74	58	59	66	84	83	83	73	80	88	78	82	89	86	73	70	75	68	75	78	75	79	87	86	87	89	87	87	87	80	77	78.8
	Minimum	56	48	52	48	52	63	64	65	64	65	56	52	59	73	63	54	48	54	48	57	57	64	63	65	68	68	69	70	67	64	60	59.9
Calhoun	Maximum	76	65	64	65	81	87	87	85	83	91	84	81	89	89	84	68	75	71	76	82	72	80	88	90	91	92	89	89	88	86	80	81.5
	Minimum	50	49	54	49	51	52	65	64	48	59	60	54	55	69	61	53	43	52	41	50	58	63	60	59	61	65	71	65	65	62	53	56.8
Earlington §§	Maximum	78	64	63	65	82	88	89	87	87	92	74	84	93	92	73	70	74	70	78	85	78	80	86	92	94	95	94	93	89	79	81	82.2
	Minimum	62	50	51	50	52	52	56	66	46	49	68	53	56	71	62	54	42	50	41	48	59	62	62	57	61	64	74	66	69	62	54	57.1
Hopkinsville §§	Maximum	77	74	64	65	81	87	87	88	82	92	74	82	90	88	78	70	74	64	75	81	77	77	85	88	89	91	91	90	89	79	80	80.9
	Minimum	52	53	53	47	50	53	56	66	53	61	63	49	57	63	64	54	44	51	44	52	57	64	65	59	63	66	71	70	72	64	58	57.9
Marion	Maximum	71	62	65	81	82	83	85	84	82	88	82	82	90	89	79	69	74	70	76	74	77	78	86	89	88	90	89	89	88	82	84	80.9
	Minimum	48	47	48	48	50	48	48	49	49	54	59	52	52	72	61	53	50	50	47	48	48	64	63	62	65	68	71	68	70	67	68	56.4
Owensboro §§	Maximum	75	63	61	64	77	84	84	82	80	86	73	76	83	86	69	66	71	65	72	77	73	76	84	86	86	88	87	85	84	77	86	77.6
	Minimum	53	49	50	50	50	52	60	64	49	57	59	56	53	57	61	54	45	50	43	50	58	65	61	61	64	67	70	65	65	53	56	56.4
Central Division																																	
Alpha	Maximum	78	67	69	61	75	80	83	80	78	88	80	78	85	87	78	67	67	59	64	77	82	66	73	81	84	86	88	88	83	71	70	76.5
	Minimum	63	64	61	53	50	50	68	70	52	70	68	50	54	73	67	56	41	52	41	50	59	65	64	59	58	60	73	75	65	61	55	59.6
Anchorage	Maximum	75	62	65	60	78	86	85	84	..	89	80	72	83	91	74	68	68	65	72	82	80	78	82	86	91	92	91	85	82	77	67	[a]78.3
	Minimum	57	49	54	47	46	54	67	60	..	57	57	57	53	62	61	57	40	39	36	48	57	64	65	56	57	62	65	62	62	61	50	[a]55.4
Bardstown §§	Maximum	81	69	67	63	80	85	88	88	84	90	79	79	85	92	69	70	71	71	75	83	85	80	88	92	92	94	93	90	83	78	83	81.5
	Minimum	58	53	53	51	46	47	63	62	54	54	62	57	53	58	65	57	42	43	40	51	57	64	64	58	60	65	69	65	63	62	56	56.5
Bowling Green §§	Maximum	87	76	67	65	67	93	92	92	91	95	79	88	96	96	74	74	70	75	81	89	82	81	78	95	97	95	97	95	97	78	78	84.5
	Minimum	54	55	58	44	46	49	49	63	51	52	57	48	52	55	64	54	44	45	43	48	49	63	65	59	62	65	67	66	67	61	56	55.2
Edmonton	Maximum	78	74	72	64	78	84	84	84	80	87	81	80	86	88	78	67	70	66	74	..	82	76	82	89	90	90	92	..	89	76	75	[b]79.9
	Minimum	49	57	60	51	41	...	65	57	47	60	47	48	53	63	61	40	40	49	40	..	40	64	63	57	57	60	63	..	62	60	56	[c]53.9
Eubank §§	Maximum	79	74	70	61	77	82	84	82	78	87	72	78	87	89	80	66	67	64	72	81	85	73	80	85	88	89	89	88	81	72	72	78.5
	Minimum	53	58	57	50	41	45	48	56	43	45	57	50	51	57	62	55	36	46	34	42	56	64	53	55	55	56	63	64	64	60	55	52.6
Frankfort	Maximum	83	79	71	63	79	86	85	89	85	90	90	77	84	91	91	78	72	73	71	81	83	86	84	88	90	94	93	98	89	82	75	83.2
	Minimum	51	51	55	51	43	45	67	57	45	50	60	52	52	57	62	55	44	42	37	50	55	64	63	55	58	62	64	62	62	61	55	54.4
Franklin	Maximum	80	70	65	61	80	87	85	86	78	90	79	82	87	89	83	64	72	64	73	80	75	75	80	84	88	90	90	89	89	76	77	79.6
	Minimum	59	47	55	47	50	54	64	66	55	60	57	51	57	70	60	54	46	54	47	55	62	61	64	62	65	69	71	72	57	63	58	58.5
Greensburg §§	Maximum	79	75	68	63	78	81	85	84	78	87	76	79	86	88	73	67	69	67	74	81	83	79	84	87	90	90	92	88	82	76	75	79.6
	Minimum	50	58	58	52	41	46	59	57	46	47	60	49	52	60	61	57	40	45	37	44	53	64	65	56	57	60	63	61	64	60	51	54.1
Irvington	Maximum	77	65	65	63	77	83	84	85	78	88	82	74	80	89	80	66	69	65	72	79	77	77	83	85	88	89	89	84	85	75	76	78.4
	Minimum	60	50	55	47	50	50	67	65	51	60	62	57	55	60	62	54	46	46	41	52	55	55	57	60	62	69	69	65	64	64	56	57.0
Leitchfield	Maximum	78	66	65	63	79	83	85	84	82	89	78	79	86	88	75	67	71	67	73	81	76	77	83	87	88	89	87	86	87	76	74	79.0
	Minimum	54	52	55	43	44	48	65	59	46	54	54	54	54	66	60	55	44	47	41	48	57	63	62	59	60	64	66	65	65	62	56	55.5
Lexington	Maximum	76	70	66	60	74	80	83	80	75	87	75	70	82	87	72	68	64	64	69	79	83	70	80	85	88	89	88	84	79	71	71	76.4
	Minimum	57	52	49	49	48	56	66	61	57	57	59	53	52	66	64	47	44	48	46	57	54	64	64	65	70	69	70	70	61	60	55	57.7
Loretto	Maximum	78	71	67	61	78	85	85	84	79	87	83	78	84	88	81	67	68	68	72	80	81	75	84	87	89	90	90	86	80	75	75	79.2
	Minimum	58	54	51	51	47	44	67	62	44	51	59	51	51	65	62	41	48	43	34	45	55	64	62	54	58	60	66	63	63	60	53	54.4
Louisville	Maximum	77	58	65	61	78	84	86	85	78	89	74	70	83	89	75	67	67	64	72	78	78	76	83	86	89	90	89	83	81	75	74	77.5
	Minimum	54	49	51	49	52	55	68	62	60	59	61	55	54	68	62	52	48	51	47	54	58	64	67	65	65	71	68	66	62	61	56	58.6
Do. (Cherokee Park)	Maximum	79	73	66	63	77	85	85	84	78	89	82	70	81	89	84	68	66	66	71	79	78	76	82	84	88	89	88	82	81	78	73	78.5
	Minimum	57	43	53	48	45	48	66	62	48	56	58	52	51	61	62	52	45	46	38	50	56	63	65	58	60	64	67	62	62	61	54	55.3
St John §§	Maximum	73	62	65	62	79	83	87	86	79	88	76	75	83	87	66	69	70	68	73	80	77	76	84	87	87	88	89	88	84	75	74	78.1
	Minimum	58	51	51	45	44	46	59	58	45	53	60	53	53	56	63	53	40	43	37	47	56	59	60	57	59	62	65	63	64	62	54	54.1
Scott	Maximum	76	70	63	63	77	80	85	83	77	86	80	64	78	88	79	69	65	62	71	66	75	76	84	84	88	89	85	83	74	74	71	76.3
	Minimum	52	47	50	44	47	45	61	63	52	50	53	55	51	60	66	54	42	45	34	50	51	60	65	57	61	66	69	63	58	57	52	54.2
Shelby City	Maximum	80	74	70	61	79	83	86	86	80	89	85	78	84	90	85	67	69	69	75	84	85	79	84	87	90	89	89	87	80	72	75	80.4
	Minimum	53	57	58	50	41	45	69	58	46	47	59	50	50	59	61	55	38	43	36	46	51	64	63	59	58	62	65	63	63	60	54	54.3
Shelbyville §§	Maximum	77	62	66	62	78	81	86	86	80	87	76	71	81	92	70	68	66	68	74	82	82	77	85	85	90	91	91	81	81	76	75	78.3
	Minimum	52	50	49	50	44	44	50	51	45	50	58	52	50	51	62	56	40	41	37	49	51	57	57	56	58	62	63	62	61	60	57	52.4
Taylorsville	Maximum	77	73	67	62	77	83	86	84	78	88	82	71	84	89	82	67	68	66	73	81	81	79	84	88	92	92	91	88	81	74	73	79.4
	Minimum	50	51	55	51	41	43	63	56	43	49	60	50	53	57	62	55	41	39	34	47	56	64	60	54	56	59	66	61	61	62	53	53.3
Williamstown §§	Maximum	79	61	66	62	77	83	86	85	78	89	76	67	79	90	72	68	66	65	73	76	83	74	85	88	90	90	89	85	78	74	75	77.7
	Minimum	57	47	47	47	43	48	52	63	48	51	53	53	49	50	67	54	42	44	40	44	51	54	62	57	61	61	69	64	60	58	50	53.1
Eastern Division																																	
Beattyville §§	Maximum	85	71	76	64	80	87	88	88	81	93	78	80	86	92	84	69	72	70	79	85	87	75	85	92	94	95	93	94	85	77	76	82.6
	Minimum	43	55	57	51	43	47	53	53	43	41	54	44	48	52	55	57	37	42	35	43	48	59	62	57	55	57	62	59	60	61	53	51.2
Berea	Maximum	72	72	68	59	69	70	71	78	78	78	78	72	83	78	77	72	68	67	67	68	68	76	76	76	73	75	79	79	78	67	66	72.8
	Minimum	60	57	58	49	45	43	46	68	45	48	59	50	53	67	69	55	40	43	44	48	48	50	57	56	57	62	69	66	62	60	55	54.5
Farmers	Maximum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville §§	Maximum	82	65	71	65	79	85	86	86	79	91	77	70	81	94	80	69	67	68	75	77	78	74	87	90	91	94	91	91	83	75	76	79.9
	Minimum	47	51	50	44	44	44	47	58	44	41	52	49	49	52	58	58	42	42	33	43	49	60	61	56	57	60	61	60	60	61	52	51.2
Middlesboro	Maximum	79	77	76	68	77	84	88	88	86	87	85	90	88	90	88	72	70	64	73	81	84	79	75	84	88	88	90	87	85	73	75	81.3
	Minimum	42	53	59	53	40	47	52	51	50	40	45	46	49	45	55	58	39	44	41	41	47	61	63	61	57	58	63	62	61	60	57	51.6
Mount Sterling §§	Maximum	80	73	71	62	78	82	83	84	75	88	73	72	83	91	79	68	66	68	73	79	80	72	82	85	90	91	89	85	79	72	72	78.3
	Minimum	54	54	55	46	43	48	59	60	45	45	59	51	51	51	64	58	40	42	35	49	52	60	63	58	58	62	67	63	61	61	53	53.8
Richmond §§	Maximum	81	73	71	60	77	82	84	84	80	89	75	79	86	91	76	66	68	68	74	82	85	71	83	87	90	91	90	89	82	72	76	79.4
	Minimum	55	58	58	49	47	47	66	63	51	56	60	52	55	66	67	59	43	45	42	49	55	65	64	61	62	65	70	66	64	61	54	57.3
Weeksbury	Maximum	71	71	71	71	67	72	80	75	67	81	81	67	68	76	68	60	60	62	64	68	77	65	69	73	77	80	80	71	67	65	62	70.5
	Minimum	40	42	59	46	44	46	52	50	49	46	61	61	58	59	60	57	42	44	38	45	49	62	61	57	56	60	64	63	62	60	58	53.3
Williamsburg §§	Maximum	86	73	75	73	81	86	89	88	84	92	78	83	91	93	85	70	71	66	77	87	86	72	83	82	92	94	93	95	86	74	76	82.6
	Minimum	48	52	63	51	43	42	53	57	48	44	62	42	53	57	59	59	39	47	41	41	50	53	59	62	58	58	64	64	65	62	56	53.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

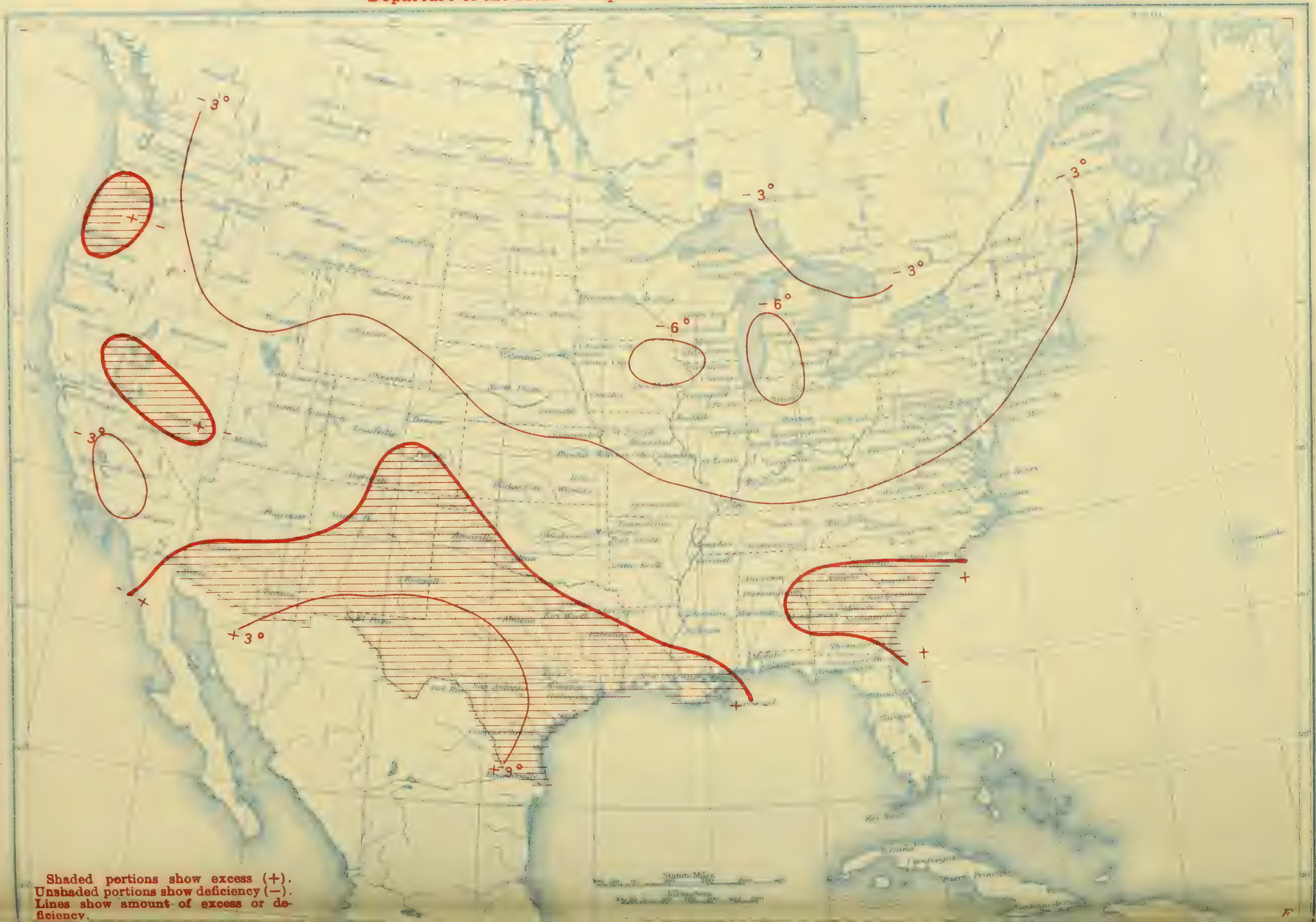
KENTUCKY SECTION

JUNE, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 27, 1916

Departure of the Mean Temperature from the Normal, June, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (–).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXI. LOUISVILLE, KY., JUNE, 1916. No. 6.

GENERAL SUMMARY.

Unseasonably cool weather prevailed during the month, mean temperatures averaging almost continuously below normal. The nights were especially cool, minimum temperatures registering in the 50's on most days and below 50 on several days. Rain occurred almost daily during the first three weeks, the rainfalls of the 6th and 19th being especially heavy and attended by much damage in some localities. Transplanting of tobacco was facilitated and a good stand obtained on account of the cool rainy weather, but the growth of corn and gardens was retarded and wheat harvest delayed by this condition. Nearly every day, during the period 6-20th the soil was too wet to be worked and crops began to suffer seriously from weeds and lack of cultivation. Favored by the fair and warm weather of the last week, however, farm work was vigorously pushed, and crops were fairly clear of weeds and generally in good growing condition at the end of the month, although still needing immediate cultivation to overcome the effects of the continued wet weather. Thunderstorms were frequent, and in many localities were attended by hail and destructive wind squalls.

PRESSURE.

Pressure formations passing over or near the section and decidedly influencing weather conditions over the State during the month were as follows: During the 1st-3d an area of low pressure of considerable strength moved from Kansas across the Lake region to the St. Lawrence Valley, with a trough extending southward into the Ohio Valley. On the 5th an area of low pressure of great strength appeared over Oklahoma. This storm moved to the central Mississippi Valley with increased energy by the morning of the 6th and to Michigan by the morning of the 7th, attended by heavy rains and severe wind squalls. It remained centered about Lake Michigan from the 7th to the 9th. During the 16-17th a low area of moderate strength passed over the Lake region with the southern edge extending into the Ohio Valley. On the 18th and 21st shallow lows of small area caused local thunderstorms in Kentucky. From the 22d to the close of the month high pressure areas largely dominated.

The mean sea-level pressure, based on the records of two stations, was 29.91 inches. The highest was 30.26 inches on the 22d, and the lowest, 29.38 inches on the 6th, both at Louisville.

TEMPERATURE.

The mean temperature for the State, based on the reports of 36 stations, was 70.1°, which is 2.8° below the normal. There have been only two Junes since State averages were established in 1889 with lower mean temperatures, viz., in 1903, 68.6°, and 1910, 70.0°. The monthly extremes were 99° at Marion on the 30th, and 45° at several stations in the central and eastern counties on the 1st. Minimum temperatures of 45° to 50° were registered at most stations on the 4th. Maximum temperatures were generally low, there being only a few days near the end of the month when they reached 90°.

PRECIPITATION.

The average precipitation for the State, as computed from the records of 48 stations, was 4.94 inches, which is 0.72 inch above normal. At the various stations amounts ranged between 2.88 inches at Weeksbury, Floyd County, and 8.99 inches at Mt. Sterling. Over the Green River basin and a few counties in the extreme eastern part of the State, the monthly amounts were less than 4 inches. Over the remainder of the State monthly totals generally ranged between 4 and 6 inches, except in the extreme western counties and the upper Licking basin, where amounts ranged between 6 and 9 inches.

WIND.

The total wind movement at Louisville was 8,144 miles, and at Lexington 8,602 miles, with average hourly velocities of 11.3 and 11.9 miles, respectively. This is the greatest wind movement on record for June at Louisville. The maximum velocity for five minutes at Louisville was at the rate of 54 miles per hour from the west on the 8th, and at Lexington 46 miles per hour from the southwest on the 2nd. Other high velocities at Louisville were: 48 miles per hour on the 30th, 44 miles per hour on the 2nd and 7th, and 40 miles per hour on the 6th, 14th and 17th; also a velocity of 40 miles per hour was reached at Lexington on the 8th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 73 per cent, at 2 p. m. 52 per cent and at 7 p. m. 61 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 56 and at Lexington 51.

MISCELLANEOUS.

June 2.—An electrical storm, attended by wind, hail and heavy rain caused considerable damage to crops, buildings, trees and telephone wires in Graves County.

June 6.—Severe local storms on the night of the 5-6th caused much damage in a number of localities. In Graves County about 500 buildings were blown down and several persons injured by falling timbers. Many bridges were washed out and roads rendered impassible from fallen trees. In Scott County several thousand acres of land planted with corn and tobacco were seriously washed by a heavy rain. In Anderson County a severe wind storm destroyed several barns and much fencing and timber.

June 18.—Following a heavy rain in the afternoon at Louisville, a boy was washed into a sewer and drowned. Tobacco and corn fields were badly eroded, fences washed out and roads damaged in Bath and adjoining countiesr Over a limited area in Trimble County wheat and other crops were beaten to the ground by hail.

June 20.—An excessive rain caused washouts in Graves County and flooding of residences in Mayfield.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	70.6	−3.3	99	38	5.27	+1.05	..
1890	78.4	+4.5	101	51	4.96	+0.74	..
1891	77.1	+3.2	97	51	4.48	+0.26	..
1892	75.8	+1.9	101	48	4.23	+0.01	..
1893	73.3	−0.6	97	46	4.64	+0.42	..
1894	75.6	+1.7	102	35	2.69	−1.53	..
1895	75.9	+2.0	104	47	3.63	−0.59	..
1896	73.5	−0.4	98	46	4.64	+0.42	10
1897	73.4	−0.5	101	41	3.61	−0.61	9
1898	76.2	+2.3	101	45	3.90	−0.32	9
1899	76.1	+2.2	100	44	2.80	−1.42	8
1900	73.9	0.0	100	40	6.14	+1.92	14
1901	75.6	+1.7	104	42	3.97	−0.25	9
1902	73.4	−0.5	101	39	4.75	+0.53	11
1903	68.6	−5.3	96	37	3.61	−0.61	10
1904	73.2	−0.7	99	48	3.14	−1.08	11
1905	74.8	+0.9	106	45	4.49	+0.27	10
1906	73.9	0.0	99	42	4.53	+0.31	11
1907	70.2	−3.7	95	41	4.91	+0.69	11
1908	73.4	−0.5	102	43	4.36	+0.14	7
1909	74.5	+0.6	99	43	5.03	+0.81	14
1910	70.0	−3.9	99	36	5.20	+0.98	10
1911	75.2	+1.3	106	45	4.06	−0.16	10
1912	70.2	−3.7	95	38	3.48	−0.74	10
1913	75.0	+1.1	107	38	2.87	−1.35	7
1914	78.3	+4.4	108	45	2.30	−1.92	5
1915	71.7	−2.2	95	42	4.79	+0.57	12
1916	70.1	−2.8	99	45	4.94	+0.72	11

Climatological data for June, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	72.2	0.8	96	24	54	18	33	3.32	-0.21	1.05	0	7	16	8	6	e.	W. T. Austin.
Blandville	Ballard	445	34	72.3	-2.6	92	22	54	4	30	8.37	+3.54	2.78	0	12	6	15	9	sw.	E. W. Horr.
Calhoun	McLean	437	12	71.4	-3.7	97	30	48	4	33	5.34	+1.82	1.97	0	13	10	16	4	sw.	W. A. Taylor.
Earlington	Hopkins	420	25	72.3	-3.3	97	30	49	4	36	3.59	+0.06	1.22	0	10	22	0	8	s.	Brick Southworth.
Hopkinsville	Christian	524	19	71.8	-3.4	92	30	52	4	31	4.47	+0.19	1.20	0	8	20	0	10	e.	W. F. Randle.
Marion	Crittenden	571	17	73.8	-1.1	99	30	58	6	28	6.05	+2.40	2.00	0	6	11	14	5	sw.	B. C. Paris.
Owensboro	Daviess	479	18	70.4	-3.7	93	30	51	4	28	4.89	+1.32	1.68	0	13	12	14	4	nw.	Henry S. Berry.
Paducah	McCracken	341	27	...	...	...	...	...	...	...	6.42	+1.51	1.53	0	10	...	...	...	...	F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	69.5	-3.6	88	30	52	4	24	5.60	+0.56	2.00	0	8	11	5	14	s.	W. W. Hicks.
Anchorage	Jefferson	700	14	69.1	-2.9	91	29†	46	4	37	4.76	+1.11	1.08	0	11	13	13	4	sw.	C. E. Barret.
Bardstown	Nelson	637	18	71.8	-2.8	95	29†	50	4	33	5.21	+0.87	1.75	0	8	21	6	3	sw.	Chas. M. Talbott.
Bowling Green	Warren	500	26	73.0	-2.9	97	29†	49	4	37	3.55	-0.16	0.82	0	11	12	11	7	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	...	...	...	...	...	...	...	3.36	-1.02	0.98	0	11	...	...	...	...	C. L. Hurt.
Cloverport	Breckenridge	375	2	...	...	...	...	...	...	...	7.53	...	2.03	0	13	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	23	^{j}69.8	-3.3	91^{i}	29	45^{j}	4	37^{j}	40.9	-0.18	1.36	0	6	11^{h}	8^{h}	3^{h}	w.	Miss Lee Ray.
Eubank	Pulaski	1177	21	68.4	-2.7	91	31	45	4	33	4.21	+0.13	1.05	0	12	5	12	13	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	70.7	2.6	93	30	49	4	33	7.28	+3.16	2.15	0	14	13	8	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	72.4	-2.5	93	29	54	4	31	3.18	-0.79	0.93	0	11	1	25	4	sw.	J. E. Newman.
Greensburg	Green	581	23	70.2	-3.3	94	31	47	4	35	3.37	-1.16	0.96	0	9	0	20	10	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	...	...	...	...	...	...	...	4.60	+0.61	2.27	0	10	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	18	70.5	-3.1	90	30	48	4	31	5.29	+1.17	2.33	0	10	13	10	7	sw.	W. J. Piggott.
Leitchfield	Grayson	635	20	70.2	-2.7	93	30	48	4	31	4.69	+0.70	1.50	0	9	12	14	4	sw.	John E. Stone.
Lexington	Fayette	989	31	69.0	-4.2	90	30	54	10	30	5.33	+1.34	2.05	0	12	9	13	8	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	69.4	-3.4	91	30	47	4	31	4.96	+0.48	2.08	0	11	12	8	10	...	Loretto Academy.
LOUISVILLE	Jefferson	525	43	70.6	-4.4	92	30	54	4	26	6.05	+1.82	2.15	0	14	8	11	11	sw.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	6	68.8	...	88	30	48	4	30	5.93	...	1.70	0	14	6	22	2	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	69.3	-2.5	93	31	47	4	33	6.02	+2.02	1.80	0	12	20	2	8	...	Sisters of Loretto.
Scott	Kenton	900	18	67.6	-1.0	89	30	51	11	29	4.42	+0.74	1.05	0	13	7	18	5	s.	E. B. Wilson.
Shelby City	Boyle	1087	21	69.9	-1.7	94	30	45	4	36	3.69	-0.13	1.25	0	11	17	12	1	sw.	H. F. Ewing.
Shelbyville	Shelby	825	26	68.9	-5.0	93	30	48	4	34	5.53	+0.83	2.00	0	11	16	4	10	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	69.2	3.1	90	26†	46	4	36	4.85	+0.32	1.67	0	14	7	14	9	s.	E. D. Bourne.
Williamstown	Grant	943	13	68.0	-2.6	94	30	50	1	31	4.28	+0.55	1.24	0	9	15	8	7	...	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	70.0	-1.8	94	27	48	1	38	4.17	-0.71	1.44	0	13	17	8	5	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	...	...	92	30	47	4	...	3.81	-1.07	1.12	0	7	20	4	6	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	...	...	...	...	...	...	...	4.20	+0.04	1.20	0	13	...	...	...	...	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	...	...	...	...	...	...	...	4.84	+0.62	1.26	0	11	12	9	9	w.	J. V. Oldham.
Farmers	Rowan	668	9	67.4	4.0	87	29	45	1	35	8.00	+4.01	4.10	0	8	22	1	7	w.	Mrs. Lurlene Triplett.
Hazard	Perry	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	Breathitt	776	4	...	...	...	...	...	...	...	4.08	...	1.10	0	10	...	...	...	...	Jas. L. McCoy.
London	Laurel	1190	1	...	...	...	...	...	...	...	4.26	...	1.30	0	10	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	11	...	...	...	...	...	...	...	4.24	-1.31	1.46	0	10	...	...	...	...	G. M. Guerin.
Manchester	Clay	1400	4	...	...	...	...	...	...	...	4.49	...	0.97	0	8	...	...	...	...	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	68.9	-4.0	94	30	48	1	38	4.99	+0.21	1.30	0	14	17	5	8	se.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	69.2	-3.0	91	30	49	4†	33	5.04	+0.50	1.70	0	13	18	11	1	...	B. H. Perkins.
Mount Sterling	Montgomery	930	25	69.1	3.3	92	30	49	4	32	8.99	+4.01	3.52	0	13	17	2	11	se.	W. R. McKee.
Pikeville	Pike	634	9	...	...	...	...	...	...	...	3.52	-0.79	0.86	0	10	...	...	...	...	I. M. Williams.
Richmond	Madison	926	23	71.0	2.4	92	30	55	10†	31	4.75	+0.81	1.80	0	11	11	9	10	w.	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	2	64.7	...	89	28	49	1†	27	2.88	...	0.89	0	6	19	1	10	...	O. A. Lund.
Williamsburg	Whitley	939	19	72.2	1.3	96	26	51	1†	40	4.67	+0.12	1.60	0	10	17	1	12	s.	N. C. Jones.
State averages and extremes				70.1	...	99	30	45	1†	40	4.94	...	4.10	0	11	13	10	7	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office addresses of these stations are as follows: Loretto, Nerinx, Ky.; Weeksbury, Melvin, Ky.

Rivers.—Good stages obtained in the Ohio River and tributaries in this State during the month. Creeks and small streams were flushed by the heavy rains, causing much damage by flooding of low lands along their courses, washing out of bridges, etc., but without noteworthy effect on the larger streams.

Daily Precipitation for June, 1916.

STATIONS.		Day of month																														[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G		.02				.70	1.05	T			.33			.27					.85	.10				T								3.32
Blandville	M		.44			T	1.56		T			1.88			.08	.51	.03		.02	.14	.90		.03	.17	1.61								8.37
alhoun	G		.15	.24			1.97	.23	.06			.33	.06		T	.36	.24		.10	1.31	.25			.04									5.34
arlington	G			.19			1.22	.10		.04			.65			.17		.15		.61	.31				.15								3.59
Hopkinsville	C			1.20				.62					1.18					.05		.72	.13			.30	.27								4.47
Dalton	O	.42		T.		T	1.78					.88							.39				.58	2.00									6.05
Owensboro	O			.33		.04	1.68	.26	.04	.06			.15			.10	.50	.09	T.	.41	T	.92		.01	T.								4.59
Paducah	O			.85		T	1.60	.20				T	1.53		.08	T	T			.46	.28			.06	1.24	.12							6.42
Central Division.																																	
lpha	C					T	2.00		T.	.15		1.80			.24		.55		T	.08	T.			.60	.18								5.60
nchorage	O		T			.49	.98	.06	.09	T	.64					.52	.46	T	1.08		.31	.03									.10		4.76
Bardstown	S			1.10		.10	.40	.55	T	T		.10	T			.80		.41		1.75		T											5.21
Bowling Green	G			.03		.82	.55			.10		.62				.18		.30		.45	.22	.25			.03								3.55
Burnside	C						.50	.72		.05	.05		.98			.31		.33		.15	.10	.12	T		T	.05							3.36
Cloverport	O			.43		.03	2.03	.49	.01	.09			.32			1.73	1.22	.22	.02	.80	T.	.14			T								7.53
dmonton	G						1.36					1.00	.75		.25	.47				.26													4.09
ubank	C			.20			.62	1.05		.10	.15		.19			.80	.55			.17	.23	.04			.11								4.21
rankfort	K		T	.05		.46	.93	.27	.04	.02	.18	1.08	T			1.04		.95	.03	2.15		.02							.06				7.28
ranklin	G		T	.23			.93	.06	.08			.51	.85			T	.13		.02	.25	.06			T				.06					3.18
reensburg	G			.10			.37	.35		.12			.35			.17		.96		.50	.45												3.37
igh Bridge	K			.58			.37	.40		.10						.35		.22		2.27	.03	.25			.03								4.60
rvington	O		T	.07	T	T	2.33	.07	.19			.07	.04			.53	.34	T	T.	1.43	.22				T.								5.29
eitchfield	G		.19				1.67	.02	T			.75			.55		.06		.82		.63												4.69
exington ***	K	T	.82			.10	.66	.15	.05	.04	.69	T			T	.18	.47		1.78	.34	T			T	.05			T			T.		5.33
oretto	S		.24			T.	1.06	.01	.07	.10	.01	.10				.65	.48	T.		2.08	.16				T.								4.96
ouisville***	O		.01			.15	1.95	.06	.07	.08	.31	T			.34		.47	.04	2.15		.06	.01		T.							.35		6.05
Do (Cherokee Park)	O		T.	.03		.46	1.70	T	.15	.06	.42	.21				.36	.47	.19	.10	1.66	.08	.04											5.93
t John	S			1.80			.53	.50		.04			.26			.87	.12	.26		1.42		.12			.08				.02				6.02
ott	L		T	.78	.02	T.	1.05	.13	.02	.02	.38					.02	.89	.08	.53	.10	T	.40			T						T		4.42
helby City	K			T		.08	.73	.13	.08	.07	.12		.07			.41	.54			1.25	.21			T.									3.69
elbyville	S		.09				.50	.30	.14	.02	.18	.56				1.30		.42		2.00	T.	.02											5.53
aylorsville	S			.50			.66	.12	.04	T	.39	.02	.01			.32	.43	.50		1.67	.03			.08	T			.08					4.85
illiamstown	L			1.24			.54	.52	T.	T.	.08	.08				.22		.54	T.	.80		.26											4.28
Eastern Division.																																	
eattyville	K			.13			.45	.50		T.	.20	.45	.16			1.44		.18	.06	.32	.15	.09				.04							4.17
erea	K						1.10	.12	.15	T.	.42					1.12	.58			.32													3.81
atlettsburg	B			.52			.40	.26		.10	.10	.16				.76		.26	.26	1.20	.02	.06				.10							4.20
almouth	L			1.09			.40	.55	.08		.20	.14				.14		.50	.16	1.26		.32											4.84
armers	L	T.		.50			.46	.55	.18	T		.63				1.21		.37		4.10													8.00
azard	K																																
ackson	K					T.	.24	.45	T.	T	.15	.67				.59		1.10	T.	.53	.11	.02	T.			.22							4.08
ondon	C						.09	.98		.12	.02		.60			.89		1.30		.10	.06	.10											4.26
ouisa	B			.07		.12	.18	.50		.16		.57				.79		.34		1.46						.05							4.24
anchester	K			.61			.55	.47			.11		.97					.74	.81	.23													4.49
aysville	O			1.30			.35	.70	.07	.15	.16					.28		.72	.10	.95	.01	.14			.04	.02							4.99
iddlesboro	C						1.70	.05	.21	.09	.03		1.18			.21	.77	.02		.22	.02	.18			.36								5.04
ount Sterling	L			.60		.21	.44	1.62		.06		.59	.02			.92		.35	.40	3.52	.01				.25								8.99
ikeville	B			.64			.16	.72	T	.08		.24	.12			.08		.44		.18						.86							3.52
ichmond	K			T		T.	.20	.80		.04		.43	.06			.54		.64	T.	1.80	.05	.15			T	.04							4.75
eeksbury	B						.66			.20						T.	.89			.30	.15				.68								2.88
illiamsburg	C			T.			.33	.97		.20	T.		1.60	.05		.33	T.	.70		.13	.31	T	T.			.05							4.67

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

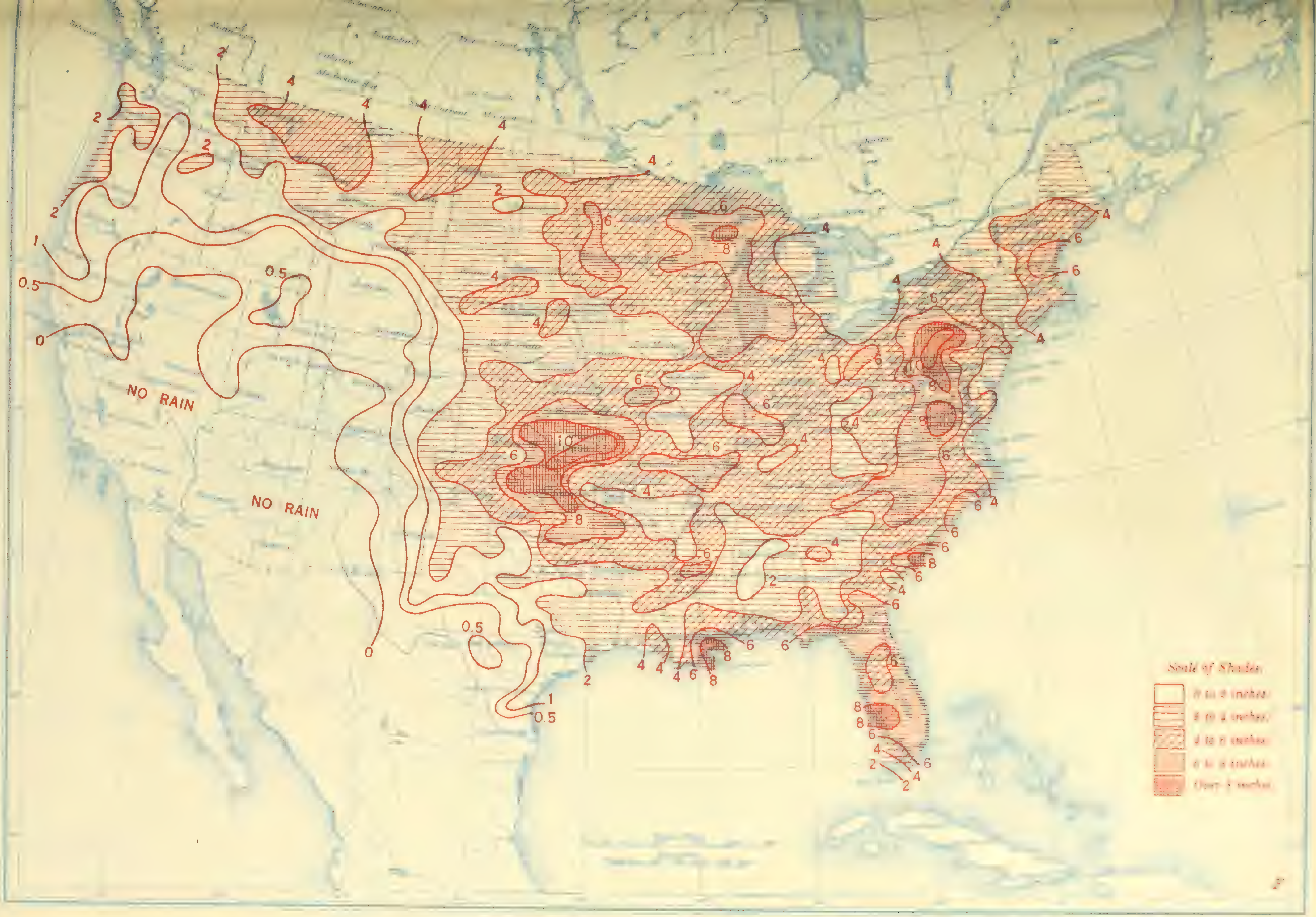
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for June, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	84	82	74	81	79	70	71	77	74	80	75	80	83	81	79	74	76	84	86	86	88	93	95	96	92	86	88	88	90	92	..	82.8
	Minimum	59	71	61	59	63	64	59	57	58	58	57	60	57	61	58	61	58	54	64	67	70	60	62	63	62	64	64	66	64	65	..	61.5
Blandville	Maximum	84	81	78	84	79	75	73	77	77	83	73	80	81	79	79	76	80	81	79	85	81	92	83	78	82	86	88	89	91	90	..	81.5
	Minimum	63	69	60	54	62	59	57	55	58	55	65	64	61	66	59	62	59	67	64	66	71	67	67	64	65	65	67	67	65	71	..	63.1
Calhoun	Maximum	85	83	72	81	79	73	73	76	75	81	77	83	84	80	82	75	80	84	83	79	79	85	87	77	86	88	90	91	94	97	..	82.0
	Minimum	59	69	59	48	64	59	58	56	54	54	57	58	57	61	57	60	61	61	62	65	71	59	67	65	62	60	64	66	64	64	..	60.7
Earlington §§	Maximum	87	87	77	85	82	68	74	79	76	83	78	84	87	82	84	75	81	83	84	84	82	92	92	77	88	92	91	92	95	97	..	83.9
	Minimum	59	64	61	49	64	63	58	57	56	53	59	59	56	64	53	62	55	62	63	65	68	61	64	67	62	59	65	64	63	65	..	60.7
Hopkinsville §§	Maximum	85	85	78	82	83	71	73	79	76	84	71	81	84	75	81	77	80	85	83	85	84	89	85	73	85	87	87	89	91	92	..	82.0
	Minimum	62	66	61	52	60	60	59	56	59	54	61	63	59	64	60	64	54	61	65	66	69	63	69	67	61	63	61	67	61	61	..	61.6
Marion	Maximum	84	82	82	81	77	73	72	76	75	82	76	81	83	77	83	79	80	82	81	83	88	80	88	77	85	86	85	90	94	99	..	82.0
	Minimum	77	71	68	70	71	58	65	64	60	62	60	62	64	68	65	62	65	65	65	64	68	60	60	64	62	62	64	72	78	75	..	65.7
Owensboro §§	Maximum	83	82	72	79	78	69	71	75	73	79	76	80	81	81	79	72	77	83	78	77	77	82	85	77	82	84	87	87	90	93	..	79.6
	Minimum	58	66	61	51	55	62	59	55	56	55	58	60	60	62	58	60	56	60	64	65	67	60	65	66	63	66	66	67	66	66	..	61.1
Central Division																																	
Alpha	Maximum	78	80	73	76	75	75	67	72	69	73	72	75	76	79	75	76	70	75	77	74	82	82	81	74	79	83	84	84	87	88	..	77.0
	Minimum	57	73	68	52	60	60	58	60	58	54	57	64	56	58	61	60	55	66	66	65	74	62	60	66	68	62	64	65	66	66	..	62.0
Anchorage	Maximum	82	..	77	81	81	71	72	71	72	76	79	84	86	84	79	74	79	83	..	89	75	81	90	89	89	89	87	89	91	91	..	^{b}81.6
	Minimum	52	..	55	46	57	60	58	50	55	53	53	52	49	57	55	57	50	55	..	63	65	53	57	62	58	55	60	65	60	67	..	^{b}56.4
Bardstown §§	Maximum	85	87	76	81	80	72	72	77	76	78	81	86	88	86	81	74	78	85	81	83	81	86	93	81	88	92	91	93	95	95	..	83.4
	Minimum	55	70	60	50	62	63	59	56	56	53	55	60	55	58	57	55	54	61	63	65	66	56	61	68	65	59	63	68	65	66	..	60.1
Bowling Green§§	Maximum	85	85	84	86	86	71	74	79	79	85	77	84	87	85	81	78	85	88	85	85	86	90	92	89	90	95	94	95	97	97	..	85.8
	Minimum	56	60	62	49	59	62	57	54	57	55	57	60	58	61	57	59	55	61	65	65	65	61	62	66	61	62	66	66	66	66	..	60.3
Edmonton	Maximum	..	83	77	82	..	81	74	76	..	80	76	..	82	73	..	78	83	..	82	83	..	84	88	88	..	89	90	89	91	..	..	^{i}82.3
	Minimum	..	58	63	45	..	60	54	57	..	51	53	..	53	58	..	51	57	..	63	63	..	57	61	66	..	58	53	..	64	..	..	^{j}57.2
Eubank§§	Maximum	82	82	74	78	79	74	69	73	72	76	78	78	78	82	78	77	74	80	80	81	83	81	89	86	83	81	88	87	90	91	..	80.1
	Minimum	51	58	65	45	48	61	56	53	51	49	51	60	52	54	58	55	53	57	62	63	63	57	56	56	63	55	60	62	62	64	..	56.7
Frankfort	Maximum	85	91	86	82	83	78	76	82	76	76	81	81	82	87	86	83	79	84	78	79	81	78	86	87	82	88	87	86	88	93	..	83.0
	Minimum	52	68	60	49	59	60	58	52	56	52	53	60	55	57	59	57	53	53	61	63	63	55	58	66	63	57	63	66	60	64	..	58.4
Franklin	Maximum	84	85	77	81	84	75	73	79	77	82	77	80	82	81	79	75	80	87	82	85	87	87	90	78	84	89	90	89	93	92	..	82.8
	Minimum	60	69	61	54	61	58	59	56	57	57	63	62	60	61	59	60	56	56	65	66	68	62	67	65	62	64	66	68	68	67	..	61.9
Greensburg§§	Maximum	81	85	75	80	81	73	71	76	75	80	78	81	82	84	79	77	77	82	80	81	83	83	88	81	86	89	91	89	93	94	..	81.8
	Minimum	53	54	63	47	56	63	58	56	54	48	53	61	54	56	59	57	51	60	64	63	66	56	60	67	65	54	62	66	63	65	..	58.5
Irvington	Maximum	83	84	73	79	79	72	72	75	72	78	75	79	82	83	79	73	76	83	84	80	75	80	88	80	81	86	87	86	89	90	..	80.1
	Minimum	57	70	61	48	63	61	59	56	57	56	57	60	58	61	58	60	56	62	60	61	67	57	65	67	66	60	60	67	71	67	..	60.9
Leitchfield	Maximum	82	82	74	79	77	71	71	75	74	79	73	80	82	80	80	75	77	83	80	78	78	84	87	80	84	89	88	88	92	93	..	80.5
	Minimum	55	69	60	48	61	60	58	55	55	53	55	59	56	59	57	58	54	59	62	63	69	57	63	66	64	60	63	67	64	65	..	59.8
Lexington	Maximum	80	82	70	75	78	68	67	72	70	68	76	77	78	81	76	75	73	80	75	78	75	76	88	75	80	88	86	84	89	90	..	77.7
	Minimum	56	65	61	57	60	58	54	54	54	54	57	60	64	60	59	55	56	60	60	64	59	55	58	67	63	65	68	66	66	71	..	60.2
Loretto	Maximum	81	84	77	78	78	73	70	76	73	78	78	81	82	81	76	74	76	82	79	78	78	82	88	79	82	87	88	88	90	91	..	80.3
	Minimum	52	60	60	47	59	62	58	56	54	52	53	53	53	55	59	57	53	62	61	63	66	53	58	66	64	56	62	64	60	64	..	58.4
Louisville	Maximum	81	84	74	79	80	70	70	74	72	75	78	80	81	82	79	73	76	82	78	78	74	80	89	79	82	87	86	88	89	92	..	79.7
	Minimum	59	70	62	54	65	60	56	57	56	55	59	60	61	61	60	57	58	61	63	65	61	57	64	68	65	64	68	66	67	66	..	61.5
Do. (Cherokee Park)	Maximum	81	83	79	78	78	70	68	74	72	74	76	78	81	81	79	72	76	80	76	78	74	78	86	84	81	85	84	84	87	88	..	78.8
	Minimum	55	68	60	48	68	60	57	53	55	52	56	57	57	58	57	58	54	59	61	63	65	50	57	66	61	57	63	63	62	65	..	58.8
St. John §§	Maximum	80	84	74	80	76	69	72	71	74	80	79	79	81	82	78	75	76	84	79	79	79	80	88	80	84	87	89	87	91	93	..	80.3
	Minimum	54	65	57	47	59	63	57	56	55	50	54	69	56	58	56	57	52	58	63	64	69	56	60	65	64	57	63	65	64	64	..	59.2
Scott	Maximum	77	80	77	75	80	71	73	72	68	69	75	77	81	81	78	71	74	74	77	77	70	75	82	78	82	84	86	83	88	89	..	77.5
	Minimum	57	67	58	52	58	61	56	52	56	53	51	57	54	58	59	54	54	56	61	57	61	52	56	65	61	57	62	62	59	61	..	57.0
Shelby City	Maximum	79	83	77	80	79	74	70	74	73	78	80	83	83	85	79	77	75	82	80	81	81	80	90	78	85	91	90	89	93	94	..	81.4
	Minimum	50	65	63	45	61	62	56	55	55	50	51	59	53	55	59	55	53	59	61	62	68	55	58	66	65	55	62	65	63	67	..	58.4
Shelbyville §§	Maximum	79	84	75	80	82	71	70	75	73	72	78	81	82	84	78	71	75	82	80	78	75	79	91	78	89	90	87	89	91	93	..	80.4
	Minimum	52	59	58	48	56	60	56	50	53	49	53	58	54	59	57	58	52	56	60	62	63	53	57	65	63	58	62	64	62	65	..	57.4
Taylorsville	Maximum	83	84	78	82	79	72	71	76	74	77	77	79	82	84	80	74	79	83	79	78	76	78	89	79	82	90	84	86	90	90	..	80.6
	Minimum	52	62	59	46	60	62	59	50	55	54	51	60	53	54	59	57	51	59	62	64	66	53	57	66	62	54	60	67	59	62	..	57.8
Williamstown §§	Maximum	80	81	74	77	83	70	69	73	70	72	78	80	82	84	82	75	75	81	79	73	72	79	85	78	84	87	87	87	90	94	..	79.4
	Minimum	50	54	56	52	57	59	55	51	54	51	52	55	56	59	57	59	53	55	60	59	60	51	56	60	59	60	62	61	60	63	..	56.5
Eastern Division																																	
Beattyville §§	Maximum	86	86	76	85	86	77	75	78	76	76	83	82	82	88	82	80	78	86	82	79	86	81	90	82	87	90	94	90	93	90	..	83.5
	Minimum	48	57	65	49	53	59	59	49	52	50	52	58	53	54	60	57	52	52	62	61	60	56	54	60	64	56	60	63	60	62	..	56.6
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Minimum	65	63	54	47	60	62	57	55	56	52	55	61	60	55	59	56	55	55	62	62	62	57	52	58	56	55	56	65	65	80	..	58.6
Farmers	Maximum	80	85	80	76	80	74	70	75	68	77	80	80	70	83	78	76	75	80	76	77	80	76	84	84	82	86	85	86	87	85	..	79.2
	Minimum	45	60	64	48	47	61	50	50	50	48	59	59	60	52	62	55	50	52	61	60	60	53	53	58	62	53	55	65	58	58	..	55.6
Maysville§§	Maximum	84	87	76	80	85	72	72	75	75	76	80	81	83	86	81	82	89	84	81	81	79	81	86	84	86	90	90	89	91	94	..	82.7
	Minimum	48	49	59	49	55	62	57	50	51	52	52	50	52	55	58	56	53	56	60	60	62	49	52	54	60	56	59	62	57	59	..	55.1
Middlesboro	Maximum	80	80	77	78	82	76	72	73	74	78	76	78	79	82	79	76	75	81	82	79	86	85	86	78	82	86	87	90	89	91	..	80.6
	Minimum	51	61	69	49	49	61	56	51	49	52	52	53	57	55	64	61	53	52	63	62	62	62	59	57	62	59	61	64	65	67	..	57.9
Mount Sterling§§	Maximum	81	84	72	78	83	73	71	75	73	68	79	78	79	84	78	77	77	83	78	77	80	76	87	80	82	87	90	90	87	92	..	80.
	Minimum	54	67	62	49	59	61	57	51	54	51	50	60	54	57	60	56	53	59	59	62	64	54	56	64	65	55	63	66	62	63	..	58.2
Richmond §§	Maximum	81	83	73	79	81	74	70	75	73	75	78	81	82	84	78	78	77	83	78	78	80	82	89	78	84	90	90	88	90	92	..	80.
	Minimum	61	69	67	59	65	66	63	56	56	55	55	60	60	60	60	59	58	59	65	62	65	56	58	66	56	59	65	66	63	67	..	61.2
Weeksbury	Maximum	71	78	77	70	72	72	65	63	60	62	65	68	70	75	75	71	67	70	69	71	77	77	75	74	75	79	84	89	79	80	..	72.7
	Minimum	49	59	64	52	49	61	58	52	50	50	50	50	54	54	65	59	52	58	54	60	62	56	55	60	57	60	62	62	63	65	..	56.7
Williamsburg §§	Maximum	84	86	83	84	84	84	74	78	76	81	78	82	86	82	82	80	87	85	85	88	87	88	87	89	88	96	92	93	93	93	..	85.2
	Minimum	51	64	69	63	58	64	64	53	56	52	54	52	51	55	55	59	54	58	54	62	64	60	58	65	58	56	65	64	66	72	..	59.2

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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WEATHER BUREAU
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CLIMATOLOGICAL DATA

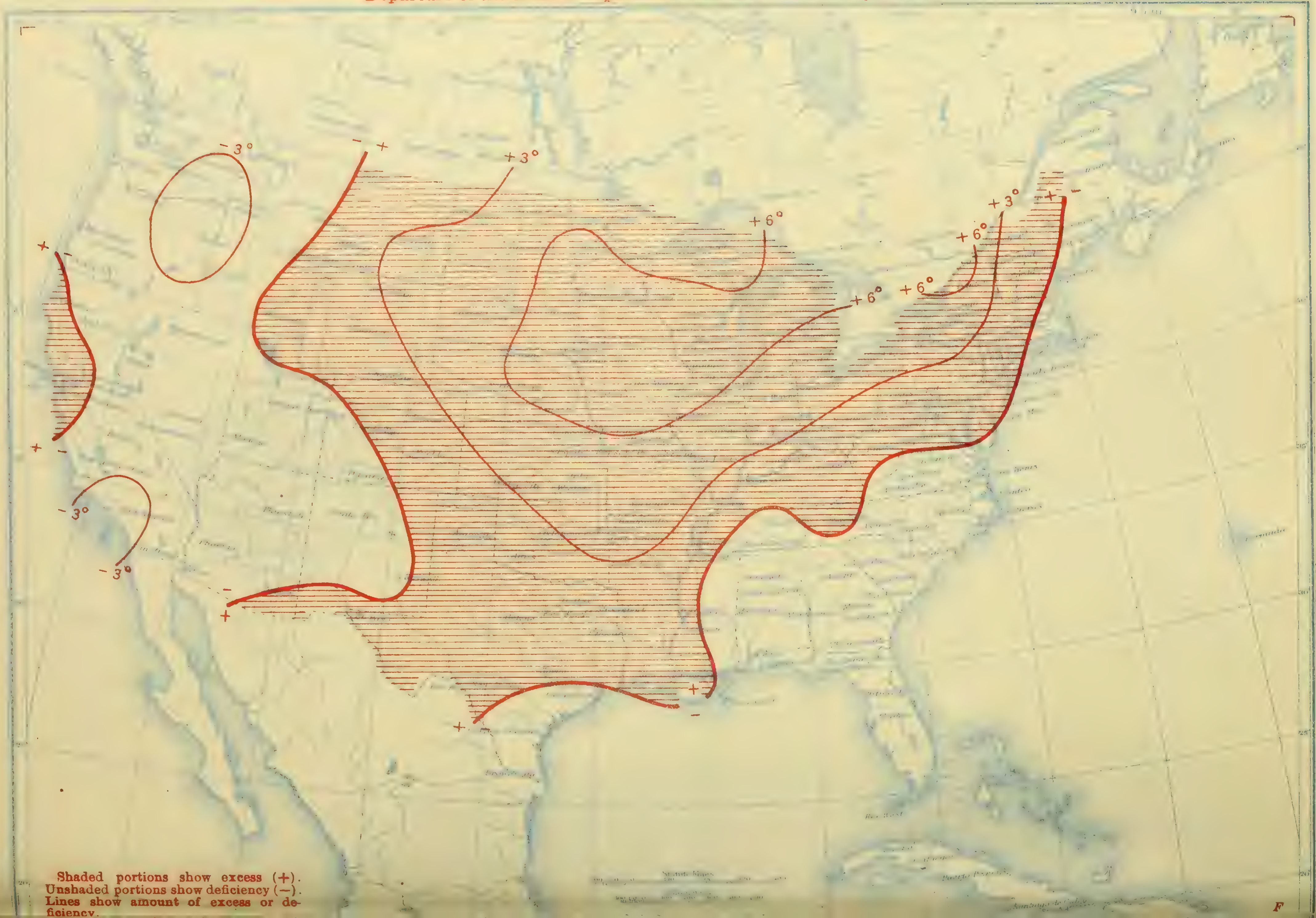
KENTUCKY SECTION

JULY, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 27, 1916

Departure of the Mean Temperature from the Normal, July, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXI. LOUISVILLE, KY., JULY, 1916. No. 7.

GENERAL SUMMARY.

The month was notable for persistently high temperature, numerous violent local thunderstorms, and the large number of casualties from lightning. The warm dry weather of the first decade favored the growth of the staple crops, and enabled farmers to complete the cultivation so badly needed at the end of June. During the period 12-27th local storms of great severity occurred nearly every day in some part of the State, causing considerable damage to crops from wind and hail. Many fields of tobacco were entirely ruined by hail. On the 12th and 13th, unusually heavy local rains occurred in Jefferson and bordering counties, the rainfall at Louisville being 5.20 inches in less than 16 hours, which is the second heaviest on record at this station. The wind movement was light and storms generally moved only a short distance from the place of formation, thus spending their entire energy over limited areas. This condition seems to account for the local deluges of rain in some places and the marked deficiencies in rainfall in nearby localities. This peculiarity is illustrated by the rainfall at Cherokee Park, Louisville, which was nearly two inches more than the amount recorded at the Louisville station, about two miles distant.

While the precipitation for the State averaged near normal, there were a number of localities in the northeastern and extreme western counties where the rainfall for the month was less than one inch, and drought conditions became severe. During the last decade there was comparatively little rain, while maximum temperatures were above 90° on nearly every day in all parts of the State. Rain was needed over much of the State at the end of the month.

PRESSURE.

High pressure areas dominated during the first five and the last ten days of the month. A severe tropical storm, which appeared on the middle Gulf coast about the 5th, extended its influence into the southern part of the State during the 7-10th, the storm having greatly decreased in energy. During the 13-14th a shallow trough of low reaching from Arkansas to the lower lakes, caused extraordinarily heavy rains in Kentucky; also during the 20th-21st a shallow trough of low covering the central Mississippi and Ohio valleys, occasioned heavy rain in this State.

The mean sea-level pressure, based on the records of two stations, was 29.98 inches. The highest was 30.23 inches at Louisville on the 30th, and the lowest 29.78 inches at Lexington on the 10th.

TEMPERATURE.

The mean temperature for the State, as determined from the reports of 35 stations, was 78.6°, which is 1.8° above normal. Minimum as well as maximum temperatures were high, resulting in more than the usual amount of discomfort from warm nights. At Louisville the temperature remained above 70° during most nights of the second and third decades, while day temperatures registered 90° or higher nearly every day, the highest being 98°. The monthly extremes were 102° at Earlington on the 27th and 52° at Farmers on the 5th.

PRECIPITATION.

The average precipitation for the State, as computed from the reports of 47 stations, was 4.17 inches, which is 0.18 inch below normal. The distribution of rainfall over the State was remarkably irregular, monthly amounts at the various stations ranging between 0.69 inch at Maysville and 10.04 inches at Cherokee Park, Louisville. Over the basin of the lower Kentucky and lower Licking and counties along the Ohio to the eastward, also over counties bordering on the Ohio from Daviess to Fulton, the monthly amounts were generally less than 2 inches. Over the upper Cumberland basin and several counties to the northward amounts ranged from 6 to more than 8 inches; while in Jefferson and bordering counties they ranged from 6 to more than 10 inches. Over the remainder of the State they varied greatly, but were generally between 3 and 4 inches. Most of the month's precipitation occurred between the 8th and 22d, but as a rule rain periods were not well defined and the individual rain storms were largely local.

WIND.

The total wind movement at Louisville was 5,682 miles, and at Lexington 6,971 miles, with average hourly velocities of 7.6 and 9.4 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 52 miles per hour from the north on the 2d, and at Lexington 36 miles per hour from the northeast on the 27th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 2 p. m. 50 per cent and at 7 p. m. 61 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 73 and at Lexington 67.

MISCELLANEOUS.

The most important instances of damage by storms are as follows:

July 12.—Excessive rains flooded sewers and basements in Louisville and caused a temporary suspension of car service.

July 13.—A barn was burned by lightning near Hopkinsville.

Continued on next page.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	75.1	−1.7	98	50	5.62	+1.27	
1890	73.0	−2.8	101	44	2.66	−1.69	
1891	74.0	−2.8	91	47	4.08	−0.27	
1892	76.5	−0.3	100	48	3.30	−1.05	
1893	78.8	+2.0	101	50	3.48	−0.87	
1894	76.2	−0.6	105	43	2.03	−2.32	
1895	75.2	−1.6	99	49	5.75	+1.40	9
1896	77.4	+0.6	103	47	7.44	+3.09	11
1897	77.8	+1.0	107	50	4.79	+0.44	10
1898	77.8	+1.0	102	48	4.71	+0.36	11
1899	77.3	+0.5	100	47	3.78	−0.57	9
1900	77.9	+1.1	101	50	4.91	+0.56	11
1901	81.7	+4.9	112	48	1.72	−2.63	7
1902	78.1	+1.3	107	48	1.91	−2.44	6
1903	77.5	+0.7	104	49	3.53	−0.82	8
1904	75.2	−1.6	99	46	3.40	−0.95	10
1905	75.9	−0.9	102	52	5.93	+1.58	13
1906	75.2	−1.6	100	51	6.02	+1.67	11
1907	78.1	+1.3	102	40	4.71	+0.36	9
1908	76.9	+0.1	100	50	3.94	−0.41	10
1909	74.8	−2.0	99	48	6.01	+1.66	11
1910	76.2	−0.6	96	51	8.63	+4.28	16
1911	75.8	−1.0	105	42	2.28	−2.07	7
1912	76.8	0.0	100	53	5.50	+1.15	12
1913	79.9	+3.1	109	48	2.54	−1.81	7
1914	78.8	+2.0	109	43	3.20	−1.15	6
1915	75.7	−1.1	102	49	5.30	+0.95	11
1916	78.6	+1.8	102	52	4.17	−0.18	9

Climatological data for July, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.: Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches: Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days: With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	12	80.0	+2.8	96	27	59	5	28	4.06	−0.99	3.00	0	5	18	10	3	ne.	W. T. Austin.
Blandville	Ballard	445	34	80.8	+2.9	96	25†	64	5	26	0.87	−3.02	0.49	0	6	12	17	2	ne.	E. W. Horr.
Calhoun	McLean	437	12	79.8	+2.8	97	17†	62	5†	28	3.58	−1.84	0.93	0	10	19	8	4	e.	W. A. Taylor.
Earlington	Hopkins	420	25	81.8	+3.9	101	27	59	5	35	3.99	−0.31	1.42	0	10	27	4	0	e.	Brick Southworth.
Hopkinsville	Christian	524	19	80.0	+1.2	96	25†	62	5	28	3.42	−0.61	1.35	0	8	18	0	13	e.	W. F. Randle.
Marion	Crittenden	571	17			100	17				4.07	+0.14	0.90	0	7	13	16	2	ne.	B. C. Paris.
Owensboro	Daviess	479	18	80.4	+2.4	97	27†	64	4	28	0.97	−2.88	0.52	0	5	19	10	2	se.	Henry S. Berry.
Paducah	McCracken	341	27								2.36	−1.58	0.58	0	7					F. L. Brown.
Central Division.																				
Alpha	Clinton	811	22	75.4	−0.8	88	6	59	5	28	8.57	+2.87	2.01	0	14	13	8	10	s.	W. W. Hicks.
Anchorage	Jefferson	700	14	79.2	+3.1	98	27	58	6	33	8.74	+4.24	4.65	0	11	19	11	1	se.	C. E. Barret.
Bardstown	Nelson	637	18	81.4	+2.9	102	27	61	5†	35	2.50	−1.98	0.80	0	6	22	6	3	se.	Chas. M. Talbott.
Bowling Green	Warren	500	26	80.6	+1.6	99	16	61	5	33	4.15	−0.19	1.32	0	8	16	11	4	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24								7.59	+2.66	1.15	0	13					C. L. Hurt.
Cloverport	Breckenridge	375	2								3.54		1.08	0	7					W. A. Cockerill.
Edmonton	Metcalfe	600	23																	Miss Lee Ray.
Eubank	Pulaski	1177	21	76.3	+1.6	92	16	58	23	30	6.64	+2.01	2.00	0	12	16	7	8		Mrs. Katie Payne.
Frankfort	Franklin	560	24	78.8	+2.4	96	27	58	5†	31	1.65	−2.32	0.45	0	7	18	9	4	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	79.1	+1.6	94	3	62	5	26	4.25	+0.14	1.20	0	6	2	25	4	ne.	J. E. Newman.
Greensburg	Green	581	23	78.8	+2.4	95	2†	57	6	33	3.76	−0.93	0.68	0	11	10	5	16	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13								3.58	−0.94	0.65	0	13					Miss Lulu Wood.
Irvington	Breckenridge	646	18	79.2	+2.1	94	27†	63	5†	25	4.46	+0.91	1.37	0	10	19	6	6	e.	W. J. Piggott.
Leitchfield	Grayson	635	20	78.8	+2.2	96	16	61	6	31	3.40	−0.74	1.82	0	7	17	11	3	ne.	John E. Stone.
Lexington	Fayette	989	31	78.0	+1.4	94	27	62	4	25	1.72	−2.72	0.93	0	12	15	10	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	77.7	+1.5	96	27	55	6	36	3.53	−0.67	1.09	0	13	11	8	12		Loretto Academy.
LOUISVILLE	Jefferson	525	43	80.5	+1.9	98	27	63	6	27	8.08	+4.34	5.20	0	11	18	5	8	n.	U. S. Weather Bureau.
Do (Cherokee Park)	Do.	534	6	77.6		93	27†	59	5†	28	10.04		3.76	0	11	14	12	5	s.	Wm. I. Hunt.
St John	Hardin	777	19	78.6	+2.9	95	2†	61	5	29	3.79	+0.24	1.12	0	9	25	4	2		Sisters of Loretto.
Scott	Kenton	900	18	78.3	+1.6	98	27	56	5	33	0.76	−2.85	0.22	0	6	15	14	2	se.	E. B. Wilson.
Shelby City	Boyle	1087	21	77.8	+2.8	95	24†	58	6	36	6.94	+2.71	1.55	0	14	17	11	3	sw.	H. F. Ewing.
Shelbyville	Shelby	825	26	79.4	+2.3	100	27	57	6	33	3.52	−0.68	1.52	0	8	24	1	6	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	77.4	+1.1	95	27	53	5	33	6.80	+2.16	1.64	0	10	14	10	7	ne.	E. D. Bourne.
Williamstown	Grant	943	13	78.6	+3.0	99	27	58	6	33	2.37	−1.69	1.23	0	6	15	12	4		Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	77.8	+2.3	99	30	52	6	39	2.91	−2.49	0.65	0	13	19	8	4	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	77.5	+1.1	96	1	55	5	32	6.15	+1.24	2.31	0	9	22	5	4	ne.	C. F. Rumold.
Catlettsburg	Boyd	534	27								1.90	−2.78	0.98	0	10					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26								1.62	−1.29	0.63	0	8	14	14	3		J. V. Oldham.
Farmers	Rowan	668	9	76.2	+1.3	95	26	52	6	36	4.82	−0.48	1.65	0	6	24	4	3	w.	Mrs. Lurlene Triplett.
Hazard	Perry		1																	
Jackson	Breathitt	776	4								3.83		1.00	0	9					Jas. L. McCoy.
London	Laurel	1190	1								3.33		1.10	0	12					C. R. Lee.
Louisa	Lawrence	584	11								2.61	−0.93	0.94	0	6					G. M. Guerin.
Manchester	Clay	1400	4								6.05		1.80	0	8					Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	78.5	+1.5	100	27	54	5†	41	0.69	−3.85	0.16	0	7	8	16	7	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	75.8	+1.1	90	1†	55	5	32	5.39	−0.11	1.26	0	19	9	20	2		B. H. Perkins.
Mount Sterling	Montgomery	930	25	77.4	+1.8	95	27	56	5	32	3.90	−1.11	2.35	0	12	22	5	4	e.	W. R. McKee.
Pikeville	Pike	634	9								5.18	+1.43	1.48	0	9					I. M. Williams.
Richmond	Madison	926	23	78.3	+1.4	95	24	59	6	34	4.75	+0.88	1.83	0	11	19	4	8	s.	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	2	75.8		94	27	55	5†	31	4.17		1.45	0	6	24	2	5		O. A. Lund.
Williamsburg	Whitley	939	19	78.0	+1.2	95	16	56	5	34	4.84	1.03	1.95	0	12	11	11	9	s.	N. C. Jones.
State averages and extremes.				78.6		102	27	52	6	41	4.17		5.20	0	9	17	9	5	ne.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡‡ Post-office address, Nerinx, Ky.

July 17.—Three men were killed by lightning, one at Owingsville, one near Owensboro, and one in Bath County. Local wind and electrical storms caused considerable damage to crops in Jefferson County, near Danville, and in the vicinity of Hebbardsville.

July 19.—During a severe wind and electrical storm over eastern Louisville a little girl was killed by lightning and five other persons injured by falling debris.

Heavy rainstorms, generally attended by hail and wind, visited Bourbon, Fayette, Woodford, Franklin, Letcher and Warren counties. Losses from washouts of bridges and destruciion of barns and crops were estimated at more than $50,000 in the Blue Grass section alone. A barn was burned by lightning near Franklin.

July 20.—One person was killed and seven shocked by lightning, and three drowned as a result of a storm in Jefferson County. This storm also caused washouts on interurban lines and considerable damage to crops.

July 23.—Two men were killed and one rendered unconscious by lightning near Vanceburg.

July 24.—Near Clintonville a man was killed and near Cynthiana seven men were stunned by lightning. A destructiv hail storm visited Nicholas County.

July 25.—Hail and windstorms caused damage to crops i the vicinity of Bowling Green; near Georgetown; near Maysvill where the estimated loss was $25,000, and in Christian Count A man was killed by lightning near Stanford. Six persons we shocked and several head of stock killed by lightning near Ha rodsburg.

July 27.—Damaging storms visited the following localiti Trimble, Bourbon, Rowan, Bath and Warren counties, Ford ville, Barbourville, Morehead and Taylorsville. Buildings we struck by lightning at LaGrange, Milton and Fordsville. farmer was killed and several persons stunned by lightning ne Taylorsville. Tobacco and corn suffered from the hail atten ing several of these storms,

There were many prostrations and several deaths from t excessive heat reported from Louisville, conditions being at the worst in the period 26th-31st when 41 prostrations and 8 deat were attributed to this cause.

ERRATA

June, 1916: Eubank, Greensburg, St John date of highest temperature should 3 th: Cherokee Park should show trace of rain on 30th

Daily Precipitation for July, 1916.

Stations.		Day of month																														[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G			.08				T					3.00	.46				.11				.38											[illegible]
Blandville	M						.01					.12	.08					.06	.02			.18								T.			0.87
alhoun	G	T		.82				T	.10		T		.64	.13	.01		.05		.93			.39				.27				.24			[illegible]
Earlington	G				1.00							.10	.08	.27	.09				.27	1.42		.32					.29						3.99
Hopkinsville	C		.20		.25							.40	1.35	.30								.09					.13	.70					3.42
Marion	O			.60			.08	T		.71		T.	.75						.37			.90		.66									[illegible]
Owensboro	O	.06			T								T.	.52	.13			T	.05		T	.21											[illegible]
Paducah	O				.08			.26				.46		.53						.58		.15											2.26
Central Division.																																	
Alpha	C			.15					.75	.80	.51	.18	.70	T				2.01	.51	T	1.70	.20			.15	.50	.25	.16					[illegible]
Anchorage	O	.10		.70					.05			.85	.22	4.65	.02			.02		.03	2.07				T			.03					[illegible]
Bardstown	S	.30		.80						T.			T.	.20	T				.30		T	.60				T			.30				2.50
Bowling Green	G				.10					.75	.18		.20	.20	1.32				.60								.50						4.15
Burnside	C			T	T					1.15	.75	.39		.75	.90	.15	T		1.02		.33	.28	.08				.70	.19	.60				7.59
[illegible]	O	T.		.60						.52			.06	.28	.31				.66			1.08							T.				[illegible]
Edmonton	G																																
Eubank	C									2.00	.21	1.21		.43	.34				.90		.85	.35	.06				.06	.08	.15				6.64
Frankfort ‡	K			.16							T.		.07	.38	.13				T		.15	.23					.23		T.				1.65
Franklin	G	T.		T.				T.		1.05	.21	T.	.32	1.15	1.20			T			T.								.32				[illegible]
Greensburg ‡	G			.51						.57	.68	.05	.32		.67				.20	.15		.66	.29						.26				3.76
High Bridge	K	.15		.08						.30	.03	.02	.05	.35	.22				.50	.29	.43	.65							.51				3.58
Irvington	O	.23		1.00					.22			.09	.34	.73				.17		1.37	.13	.18											4.46
Leitchfield	G			.67					T.	.30		.48	1.34	.02				.09								.50							3.40
Lexington ***	K		.02							.09	.08	T	.93	.07		.01		.02		.16	.18					.04		.01				.11	1.72
Loretto	S			.67						.12	.15	.15	T.	.39	.01	.01		.25		.53	1.09	.04				.03			.09				[illegible]
Louisville***	O	T	.37	.17					.28		T.	.07	3.17	2.52				.03		T.	1.27	.02				T.		.66				.12	[illegible]
Do (Cherokee Park)	O	.30		.75					.19			.25	1.12	3.76				.78		.62	2.10							.64				.13	[illegible]
St. John	S	T.		1.12	.13					.15	.03		.02	.94	.20				T.			.22					.98						3.79
Scott	L		.12								T	T.	.01	T.						T	.20	.04		T.	.17							.22	0.76
Shelby City	K			.27						.34	.88	.07	.27	.03				.81		.64	.49	1.00	.15		.17	1.55			.27				6.94
Shelbyville ‡	S			.32						.26			.07	.95	.34				.01		.05	1.52											3.52
Taylorsville	S	.02		.36				T	T.			.02	1.08	1.41	.01				T.	1.64	.36				T	1.40		.50					6.80
Williamstown	L	T.		T.								T.	.03	.19	.20		T.		.02		.70	1.23	T.			T.							2.37
Eastern Division.																																	
Beattyville	K				.06					.65	.40	.10	.04		.40		.11	.33	.30		.08	.18	.14						.12				2.91
Berea	K								T.	.65	.09		.34	.30	T.			2.31		.91	.07	.62				T		T.	.86				6.15
Catlettsburg	B									.10	.10	.28			.06		.98	.10		.06	.02	.14							.06				1.90
Falmouth	L	.06		T.								.17		.30	.15						.63		.04				.17		.10				1.62
Farmers	L									T	.24	T.	T.		1.06		T	1.65	1.35	T.	T	T	.27	T.					.25				4.82
Hazard	K																																
Jackson	K			.22						.49	.29				.78		T.	.02	.52	T.	1.00	T.	.25						.26				3.83
London	C				.06					1.10	.50	.10		.07	.02	.39			.21		.40	.25	.11						.12				3.33
Louisa	B										.54	.15					.55	.94					.08						.35				2.61
Manchester	K									1.80	.51	.17	.21								.20	.58	1.63						.95				6.05
Maysville ‡	O												.05	T.	.10		.05	T				.05	.15				.16		.13				0.69
Middlesboro	C	.03			.05			.02	1.26	1.02	.11	.09	.08		.08	.04	.03	.26	.03	.93	.26	.51			.38	.02			.19				5.39
Mount Sterling	L									.21	.11	.10	.11	.13	.02		.05	T	.40		.18	2.35	.06			T.	T.		.18	T.			3.90
Pikeville ‡	B										.94					.24	.86	.38	.24		.46	1.48	.26						.32				5.18
Richmond	K									.07	.50	.73	.12	.10	.18		T.		.47		T.	.43				1.83	.20		.12				4.75
eksbury	B			.10						.80					T.	.87	.12	.83	T	1.45													4.17
Williamsburg	C				.60					1.95	.68	T	T		.25		.25		.45	.10	.15	T	.18			.04	.03		.16				4.84

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station: precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

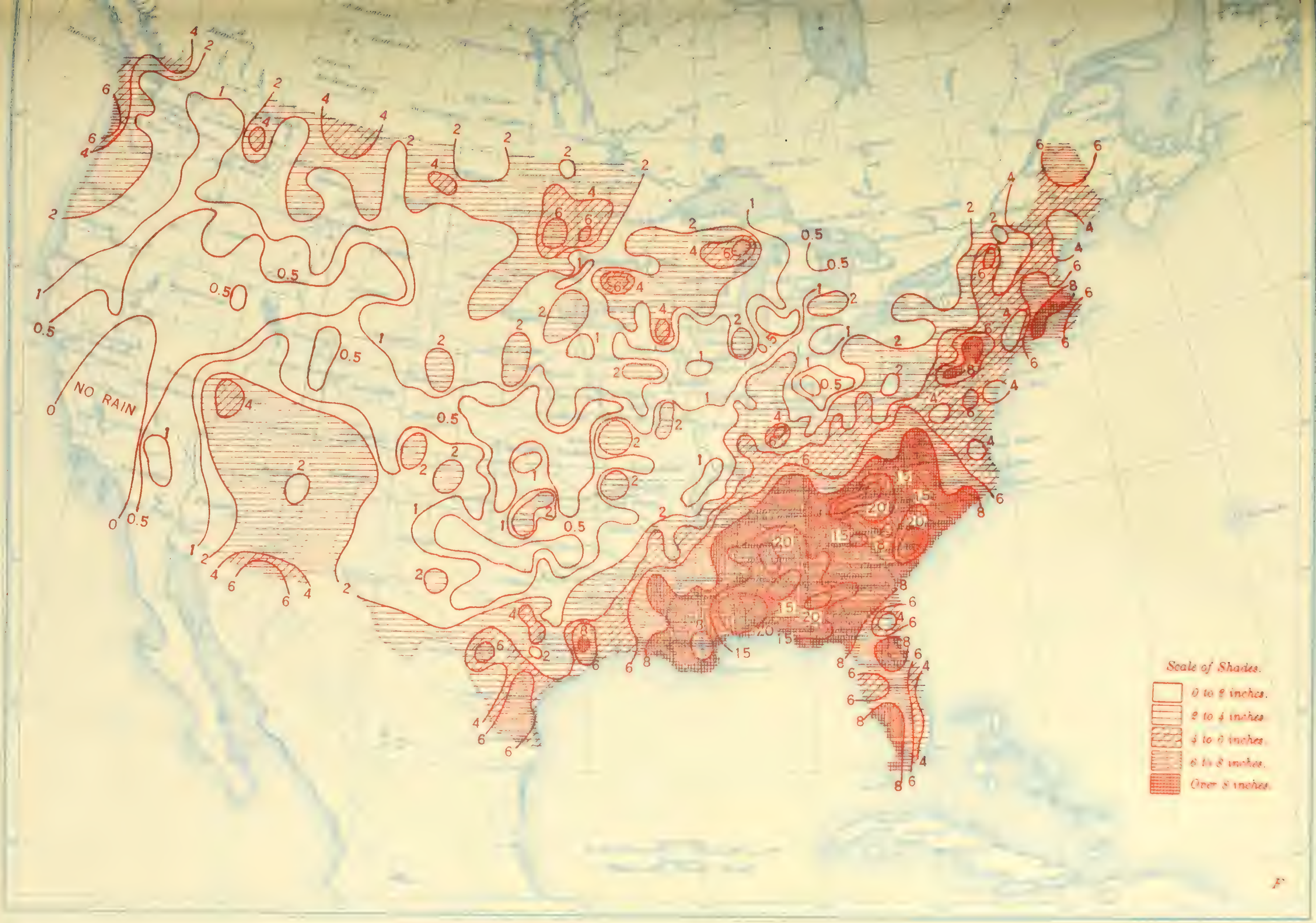
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for July, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	90	93	92	86	87	91	88	89	81	87	89	78	86	89	90	93	94	91	91	88	87	89	92	93	94	93	96	93	95	94	94	90.
	Minimum	67	67	69	65	59	65	69	68	69	68	68	73	73	73	71	72	74	70	72	74	72	70	65	70	71	70	74	70	73	74	73	69
Blandville	Maximum	93	94	91	87	84	88	83	89	86	88	92	82	91	87	93	94	94	89	89	89	87	90	92	93	96	94	96	92	95	91	94	90.
	Minimum	74	70	73	68	64	69	71	69	68	69	70	72	71	74	74	75	75	71	72	74	72	72	66	70	71	69	73	69	73	73	74	71.
Calhoun	Maximum	93	96	94	86	86	90	87	88	85	86	91	78	89	89	91	94	97	91	91	87	89	90	92	94	97	94	96	94	95	92	95	90.
	Minimum	69	68	69	64	62	62	69	68	67	67	68	71	69	71	72	71	72	68	70	72	71	67	64	68	69	67	74	68	72	72	72	68.
Earlington §§	Maximum	95	98	97	90	91	95	89	92	85	88	92	94	90	94	95	100	100	95	94	90	89	94	97	98	99	96	101	97	100	97	99	94
	Minimum	71	67	71	65	59	64	70	69	68	69	67	73	70	71	70	70	73	70	70	73	70	69	62	67	68	68	71	70	72	72	72	69.
Hopkinsville §§	Maximum	93	92	94	87	87	91	82	89	81	86	88	82	85	88	91	95	93	92	89	85	86	90	93	93	96	91	96	90	95	90	94	89.
	Minimum	71	69	72	67	62	67	71	68	68	69	69	72	71	70	71	71	75	71	72	73	72	71	65	70	71	70	72	69	72	75	74	70.
Marion	Maximum	94	95	96	86	88	88	84	89	90	87	92	85	90	88	92	96	100	94	93	86	87	90	93	93	96	95	90	90	97	94	96	91.
	Minimum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Owensboro §§	Maximum	90	94	92	85	86	89	88	90	87	85	87	88	87	89	90	94	94	90	91	86	87	90	93	94	95	93	97	94	97	93	95	90
	Minimum	70	68	70	64	65	65	70	71	70	69	71	73	70	72	74	72	73	71	72	73	72	67	65	71	70	69	72	70	73	73	73	70
Central Division																																	
Alpha	Maximum	87	86	85	81	84	88	79	72	70	80	77	80	75	85	83	86	86	86	84	82	79	85	84	85	85	84	85	84	85	85	86	82.
	Minimum	67	68	70	68	59	60	70	60	67	68	70	71	70	70	69	71	75	67	70	73	70	70	64	67	68	65	66	66	69	70	71	68.
Anchorage	Maximum	92	93	86	89	89	91	92	92	86	94	86	81	80	96	90	95	95	95	93	89	87	90	93	95	93	94	98	95	95	96	92	91
	Minimum	65	67	67	65	59	58	63	63	66	67	68	68	69	70	70	66	71	69	71	68	69	68	68	66	66	67	69	66	72	69	71	67
Bardstown §§	Maximum	95	96	94	89	91	96	93	93	81	91	87	83	86	97	92	98	99	95	96	88	90	95	98	98	99	97	102	97	100	97	95	93
	Minimum	68	68	68	66	61	61	66	68	68	68	71	71	71	72	71	69	74	69	72	70	71	71	64	68	68	67	72	68	72	72	73	69
Bowling Green §§	Maximum	96	94	99	90	92	95	86	84	79	88	87	86	88	95	96	99	95	91	93	93	91	94	96	96	97	95	97	95	98	95	98	92
	Minimum	68	69	67	66	61	62	65	68	67	67	69	70	71	71	69	69	71	70	70	73	72	70	64	67	71	67	67	68	69	69	69	68
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	.	.	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Eubank §§	Maximum	91	91	90	82	84	91	91	85	78	82	78	84	84	89	83	92	89	91	87	82	85	85	87	88	89	91	91	89	89	91	91	87
	Minimum	64	66	66	65	62	61	64	65	65	67	61	67	68	68	68	69	72	65	67	68	69	67	58	63	65	62	62	65	65	68	68	65
Frankfort	Maximum	90	93	88	84	87	89	90	91	84	87	85	84	81	92	91	92	95	92	93	91	89	89	93	92	94	94	96	92	94	94	94	90
	Minimum	65	67	67	62	58	58	60	66	69	68	69	70	68	69	71	68	73	69	69	67	69	68	63	67	67	66	70	67	71	70	73	67
Franklin	Maximum	92	93	94	87	88	91	82	83	74	82	86	84	84	88	88	91	92	92	89	87	86	89	90	91	92	91	93	89	92	91	92	88
	Minimum	70	68	69	66	62	65	72	70	65	67	69	70	71	70	70	72	74	72	71	73	72	71	65	69	71	67	72	69	73	74	73	69
Greensburg §§	Maximum	93	95	91	83	86	90	86	86	75	83	80	83	88	91	89	94	95	92	90	88	83	89	92	94	95	94	94	91	95	91	95	8
	Minimum	67	67	66	65	68	57	68	68	67	69	68	69	70	69	67	68	71	67	69	69	72	70	59	65	65	63	67	66	70	70	69	67
Irvington	Maximum	88	92	88	82	84	86	88	88	83	83	86	77	87	89	87	93	93	91	92	88	85	87	90	91	93	92	94	92	94	93	93	8
	Minimum	69	69	67	67	63	63	63	68	68	65	71	72	73	72	72	71	74	71	73	72	72	69	66	71	71	70	71	70	74	73	74	6
Leitchfield	Maximum	91	94	91	85	87	90	86	86	78	83	84	78	87	92	88	96	94	92	92	85	87	92	92	92	91	93	95	93	95	91	93	8
	Minimum	67	63	67	67	62	61	68	68	66	67	69	69	71	70	70	69	72	69	69	73	73	63	..	69	69	67	70	67	71	71	70	*6
Lexington	Maximum	88	91	85	82	83	88	90	88	76	84	81	82	82	90	83	89	91	92	85	83	86	88	90	92	88	90	94	90	90	93	89	8
	Minimum	67	71	68	62	65	63	65	71	66	66	69	69	69	69	70	70	70	69	69	69	69	69	73	73	70	68	70	69	73	73	70	6
Loretto	Maximum	90	93	90	84	87	91	89	87	76	85	81	79	81	92	89	93	95	91	90	85	87	89	92	93	94	93	96	91	94	92	93	8
	Minimum	65	65	66	64	56	55	64	64	67	67	66	70	69	69	69	66	71	67	69	68	68	69	60	66	66	66	70	65	69	68	70	6
Louisville	Maximum	89	94	86	85	87	90	90	90	85	86	82	77	79	91	90	95	94	91	91	90	87	90	93	94	94	95	98	92	96	93	93	8
	Minimum	69	69	68	67	65	63	69	72	70	69	73	71	70	73	73	72	73	72	75	69	71	71	72	72	72	73	74	72	75	75	75	7
Do. (Cherokee Park)	Maximum	88	90	86	82	84	87	86	87	83	84	82	77	77	89	88	90	90	89	89	86	86	87	90	91	88	90	93	89	93	91	90	8
	Minimum	65	69	66	62	59	59	63	66	66	67	68	70	69	70	69	69	73	69	72	69	69	66	66	69	69	69	72	68	73	70	73	6
St. John §§	Maximum	92	95	91	82	83	87	88	87	89	85	83	77	87	89	88	94	94	92	90	89	88	87	92	91	94	94	94	93	94	93	95	8
	Minimum	67	66	65	65	61	64	64	66	65	68	69	69	70	69	71	69	71	68	71	69	71	67	63	68	66	65	69	66	70	70	69	6
Scott	Maximum	89	92	86	84	84	86	92	89	84	85	84	83	84	92	89	94	90	95	88	83	87	91	95	93	91	94	98	95	96	96	95	8
	Minimum	64	65	68	58	56	60	59	63	67	67	68	70	68	69	71	71	74	67	72	67	68	64	64	67	68	67	71	68	71	70	69	6
Shelby City	Maximum	93	91	92	84	87	94	91	89	75	88	81	81	85	91	85	94	92	93	86	85	88	90	94	95	90	92	95	90	91	94	92	8
	Minimum	67	65	66	61	59	58	61	65	65	65	66	69	68	68	68	69	70	65	71	69	68	69	60	65	65	63	68	65	69	69	75	6
Shelbyville §§	Maximum	92	94	88	86	87	90	90	90	82	89	86	81	78	91	91	95	97	96	92	86	90	92	97	96	96	97	100	97	98	97	94	9
	Minimum	64	67	67	61	59	57	63	65	67	67	69	69	69	70	69	68	74	69	73	67	68	67	68	68	67	65	70	67	68	71	72	6
Taylorsville	Maximum	89	93	86	86	86	85	89	87	80	87	84	78	82	91	88	94	92	93	90	86	88	88	91	90	92	92	95	91	93	93	91	8
	Minimum	62	61	66	63	53	57	60	63	68	68	67	70	70	70	69	67	71	69	69	67	69	69	62	66	65	65	68	66	71	69	71	6
Williamstown §§	Maximum	91	93	87	88	87	90	94	93	93	90	83	84	80	93	87	95	93	93	88	86	88	91	95	95	95	95	99	93	95	95	93	
	Minimum	63	65	65	59	59	58	61	63	67	65	67	68	67	67	68	69	70	67	70	66	66	65	66	67	69	67	67	67	71	70	73	
Eastern Division																																	
Beattyville §§	Maximum	94	94	91	84	81	91	93	92	76	89	86	91	88	93	85	95	84	96	89	87	90	89	90	92	96	94	98	90	92	99	94	
	Minimum	63	67	65	59	55	52	57	64	65	66	65	65	67	70	68	71	67	66	68	69	69	68	60	64	67	64	66	66	69	66	69	
Berea	Maximum	96	94	93	85	87	93	92	86	77	83	81	84	88	90	91	94	88	92	86	81	86	84	89	90	90	93	93	86	90	91	90	
	Minimum	65	65	67	65	55	64	61	65	66	67	67	64	69	70	70	70	69	65	71	70	68	66	60	59	77	67	65	65	68	70	72	
Farmers	Maximum	90	85	85	83	85	88	88	89	81	87	85	84	85	91	88	89	85	85	85	86	88	90	92	90	85	95	87	90	94	92	94	
	Minimum	64	65	66	56	53	52	56	63	66	68	65	66	68	69	70	72	69	66	69	67	66	59	62	65	65	68	65	68	65	66	65	
Maysville §§	Maximum	94	96	90	87	89	91	96	94	85	94	91	90	84	96	92	94	97	98	87	92	94	95	97	97	97	95	100	93	96	98	96	
	Minimum	63	63	65	55	54	54	55	55	66	66	63	65	62	67	65	70	70	65	66	66	69	66	59	62	66	64	66	65	67	65	69	
Middlesboro	Maximum	90	90	86	84	87	90	85	78	72	85	81	84	86	89	79	89	82	90	88	84	79	86	88	88	88	87	88	88	88	89	90	
	Minimum	67	61	67	67	55	61	64	65	65	67	67	67	67	67	65	72	71	66	67	68	68	69	61	63	65	66	63	65	69	67	70	
Mount Sterling §§	Maximum	90	92	87	82	83	88	91	90	77	85	85	85	87	90	87	91	89	92	88	87	90	87	92	92	92	92	95	89	89	94	92	
	Minimum	64	67	66	60	56	57	61	66	65	66	67	68	69	68	70	71	72	66	71	68	68	68	60	64	68	65	65	65	68	67	72	
Richmond §§	Maximum	93	92	89	85	89	93	91	90	78	85	79	83	87	93	85	92	89	92	85	82	88	90	94	95	92	91	94	91	92	94	90	
	Minimum	68	70	68	63	60	59	64	68	66	66	68	69	69	68	68	70	72	69	70	70	67	69	64	66	69	65	67	67	70	71	73	
Weeksbury	Maximum	84	86	86	75	75	79	79	79	77	79	79	81	93	90	81	91	86	93	90	89	89	87	90	89	92	93	94	90	90	93	86	
	Minimum	66	66	65	62	55	55	61	63	65	65	66	67	67	65	75	70	69	66	67	69	68	72	59	64	66	65	67	65	65	65	70	
Williamsburg §§	Maximum	92	93	92	86	90	91	88	75	73	89	88	88	89	91	91	95	89	92	90	88	88	92	90	92	91	92	91	90	92	94	91	
	Minimum	68	68	67	60	56	63	66	67	68	68	64	66	69	69	66	72	70	64	67	67	69	68	66	63	66	66	67	66	69	69	68	

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

*, ¹, ², etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
F

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

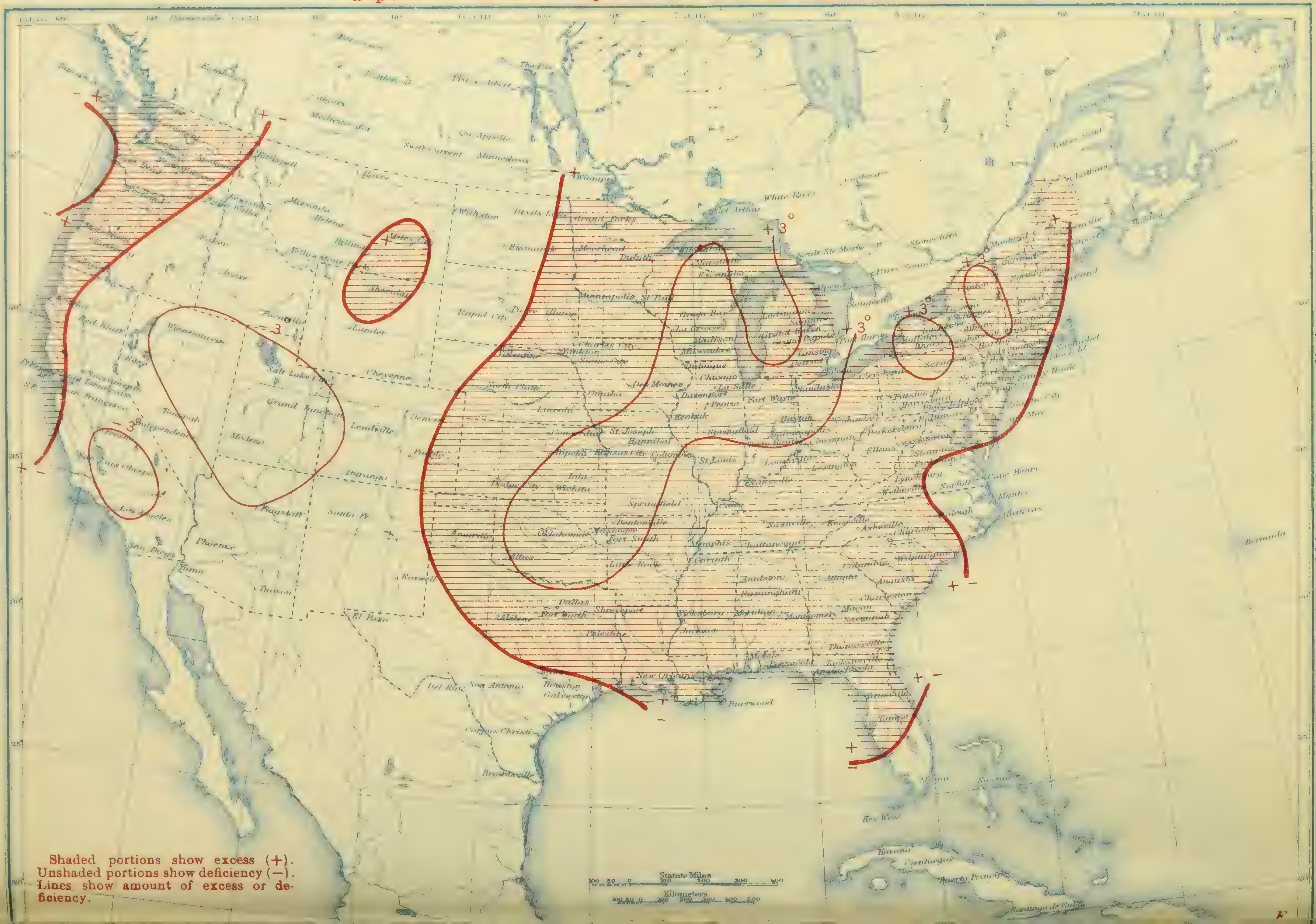
KENTUCKY SECTION

AUGUST, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 21, 1916

Departure of the Mean Temperature from the Normal, August, 1916.


Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXI. Louisville, Ky., August, 1916. No. 8.

GENERAL SUMMARY.

Temperature conditions during the first three weeks of August were similar to those prevailing in July preceding, viz., sultry days with maximum temperatures generally above 90°, and warm oppressive nights. Relief from the hot weather came during the last week, when minimum temperatures on several days ranged generally between 47° and 55°.

Precipitation for the State as a whole averaged considerably above normal, yet at most stations in the western counties and at a few stations in the central counties it was decidedly below normal. The distribution over the State was irregular, and there were many localities where rainfall was insufficient for the needs of the crops, although surrounded by areas in which seasonable conditions prevailed. This tendency of the rainfall to miss certain districts was most marked in the central counties. Where rainfall was ample the high temperature was favorable for maturing the corn and tobacco; but in some localities, especially the western counties where moisture was deficient, the intense heat injured corn, late potatoes, pastures and gardens. The high temperature hastened the maturing of tobacco, and cutting and housing became general under favorable conditions during the last decade. This crop promises to be exceptionally good and of fine quality. There was considerable damage to corn from storms in the extreme eastern counties.

PRESSURE.

Low pressure areas affecting weather conditions over the State during the month were mostly long, narrow and shallow trough formations, extending in a northeast-southwest direction and drifting over the central Mississippi-Ohio valleys broadside on. Such trough formations obtained in the periods 7-8th, 10-11th, 15th, 22d and 26th. Pronounced high pressure areas dominated conditions during the 1st-2d, 5-6th, 12-14th, 17-20th, 23d-24th and 27th-31st.

The mean sea-level pressure, based on the records of two stations, was 30.04 inches. The highest was 30.26 inches on the 28th and the lowest 29.82 inches on the 8th, both at Louisville.

TEMPERATURE.

The mean temperature for the State, based on reports from 38 stations, was 77.0°, which is 1.3° above normal. The monthly extremes were 101° at Earlington on the 4th, 7th and 19th, and 47° at Taylorsville on the 29th. The warmest periods were 1st-7th and 17th-22d, with maximum temperatures ranging between 90° and 101°. There was a sharp fall in temperature on the night of the 23d, and the nights during the remainder of the month were cool.

PRECIPITATION.

The average precipitation for the State, as determined from the reports of 48 stations, was 4.25 inches, which is 0.90 inch above normal. Monthly amounts at the various stations ranged between 0.78 inch at Russellville and 8.19 inches at Loretto. Its irregular distribution is shown by the differences between monthly amounts at contiguous stations, which ranged in many cases from three to five inches. Over the middle basin of the Green River and southward to the Tennessee boundary, and in the extreme western part of the State, less than 2 inches occurred. Over the northeastern counties, also in Clinton, Marion and Jessamine counties, amounts ranged from 6 to 8 inches. Over the rest of the State amounts were generally between 3 and 5 inches. Most of the rain occurred in the period 8-16th in the central and western counties, but in the northeastern counties showery conditions prevailed from the 3d to 16th. Showers were also general over the State on the 23d and 28th.

WIND.

The total wind movement at Louisville was 5,974 miles, and at Lexington 6,907 miles, with average hourly velocities of 8.0 and 9.3 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 54 miles per hour from the northwest on the 26th, and at Lexington 38 miles per hour from the west on the 11th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 81 per cent, at 2 p. m. 51 per cent and at 7 p. m. 62 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for the month at Louisville was 69 and at Lexington 70.

MISCELLANEOUS.

Severe local thunderstorms were frequent, the more important instances of damage being as follows:

August 3.—Rain, wind and hailstorms caused landslides and damage to crops in Letcher and Bell counties. Three men were killed by lightning in Fleming County; also seven head of stock were killed near Franklin.

August 11.—A family was shocked and team of mules killed by lightning near St. Matthews.

August 15,—Nicholasville was flooded by a heavy rain, with damage estimated at $15,000.

August 16.—Damage by rainstorms occurred in Barren, Breckenridge and Warren counties, and generally over the eastern mountain counties. A residence at Cloverport was struck by lightning.

August 26.—A barn near New Castle and one near Owensboro were destroyed by lightning. A windstorm damaged shade trees and telephone and telegraph systems at Henderson.

There were many prostrations from heat on August 4th, 5th, 7th and 11th. Eighteen prostrations with a number of deaths were reported from Louisville alone and one death from Warren County.

COMPARATIVE DATA FOR AUGUST.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more
1889	70.6	−5.1	100	43	1.23	−2.12	.
1890	73.2	−2.5	101	44	6.16	+2.81	
1891	72.9	−2.8	105	43	5.82	+2.47	.
1892	75.4	−0.3	96	45	3.13	−0.22	
1893	74.8	−0.9	99	48	1.72	−1.63	
1894	77.1	+1.4	105	41	3.02	−0.33	..
1895	76.6	+0.9	102	49	2.15	−1.20	6
1896	77.1	+1.4	105	41	2.83	−0.52	5
1897	75.2	−0.5	101	49	2.33	−1.02	6
1898	76.7	+1.0	100	55	3.83	+0.48	7
1899	78.1	+2.4	102	51	3.09	−0.26	6
1900	80.4	+4.7	104	52	2.74	−0.61	6
1901	75.5	−0.2	101	50	5.12	+1.77	12
1902	75.6	−0.1	103	45	2.48	−0.87	7
1903	75.5	−0.2	100	49	3.27	−0.08	8
1904	75.2	−0.5	100	45	2.64	−0.71	8
1905	75.7	0.0	99	42	3.82	+0.47	9
1906	77.4	+1.7	99	45	4.38	+1.02	10
1907	74.8	−0.9	99	48	4.27	+0.92	10
1908	76.3	+0.6	104	49	2.79	−0.56	6
1909	76.9	+1.2	104	45	2.60	−0.75	7
1910	74.0	−1.7	100	46	2.72	−0.63	6
1911	76.2	+0.5	106	45	4.03	+0.68	10
1912	73.7	+2.0	98	43	4.71	+1.36	13
1913	78.0	+2.8	108	44	2.81	−0.54	7
1914	76.0	+0.3	100	49	5.94	−2.59	12
1915	71.3	−4.4	100	42	6.29	+2.94	14
1916	77.0	+1.3	101	47	4.25	+0.90	9

Climatological data for August, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	77.9	+1.5	96	11†	49	29	36	1.60	−1.78	0.52	0	5	14	12	5	ne.	W. T. Austin.
Blandville	Ballard	445	34	78.1	+1.3	95	7	54	30	30	2.00	−1.02	1.27	0	6	10	13	8	sw.	E. W. Horr.
Calhoun	McLean	437	12	78.0	+0.3	97	7†	49	29	35	3.21	+0.06	0.85	0	9	12	17	2	sw.	W. A. Taylor.
Earlington	Hopkins	420	25	79.8	−3.2	101	4†	50	29†	41	1.33	−1.99	0.42	0	6	24	5	2	se.	Brick Southworth.
Hopkinsville	Christian	524	19	78.6	+0.8	98	20	52	29	34	2.20	−0.85	1.30	0	6	17	3	11	e.	W. F. Randle.
Marion	Crittenden	571	17	78.9	+0.8	97	7	52	29	30	5.90	+3.11	2.55	0	6	12	15	4	sw.	B. C. Paris.
Owensboro	Daviess	479	18	77.6	+1.2	96	7	53	30	29	2.28	−1.31	0.50	0	9	15	13	3	sw.	Henry S. Berry.
Paducah	McCracken	341	27	......	......	......	......	......	......	......	2.55	−0.41	1.00	0	5	......	......	......	......	F. L. Brown.
Russellville	......	......	5	78.0	......	98	12	49	28†	36	0.78	......	0.36	0	4	18	7	6	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	22	74.8	−1.3	88	6	54	30	27	7.03	+2.70	2.76	0	5	12	6	13	s.	W. W. Hicks.
Anchorage	Jefferson	700	14	76.3	+1.7	95	4†	48	29	36	4.12	+0.54	1.26	0	7	18	12	1	sw.	C. E. Barret.
Bardstown	Nelson	637	18	79.0	+1.8	99	19	50	29	38	5.70	+2.09	2.40	0	5	14	8	9	sw.	Chas. M. Talbott.
Bowling Green	Warren	500	26	79.6	+0.7	99	11†	51	29	38	2.68	−0.84	0.78	0	11	19	10	2	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	......	......	......	......	......	......	......	4.42	+0.31	1.94	0	8	......	......	......	......	C. L. Hurt.
Cloverport	Breckenridge	375	2	......	......	......	......	......	......	......	4.69	......	1.40	0	12	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Lee Ray.
Eubank	Pulaski	1177	21	75.0	+1.2	94	6	48	30	38	2.67	−1.28	1.40	0	8	9	7	15	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	77.0	+2.3	96	7	50	29	31	4.51	+1.09	2.00	0	10	12	10	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	77.8	+0.6	93	7	53	29	30	3.49	+0.19	1.14	0	8	2	28	1	sw.	J. E. Newman.
Greensburg	Green	581	23	77.1	+1.5	98	6	49	29†	35	4.96	+1.32	2.35	0	10	4	9	18	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	......	......	......	......	......	......	......	6.16	+2.81	2.15	0	14	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	77.2	+1.2	94	7†	52	29†	30	2.25	−1.12	1.15	0	2	20	6	5	sw.	W. J. Piggott.
Leitchfield	Grayson	635	20	77.0	+1.6	95	6†	51	29†	35	1.30	−2.37	1.00	0	7	13^a	15^a	2^a	sw.	John E. Stone.
Lexington	Fayette	989	31	76.0	+1.4	93	19	54	29	23	2.34	−1.23	1.44	0	10	16	10	5	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	^{a}76.3	+0.6	93	6†	48	30	35^a	8.19	+4.53	2.70	0	11	12	7	12	......	Loretto Academy.
LOUISVILLE	Jefferson	525	43	78.2	+1.7	95	7	55	29	27	3.06	−0.45	1.36	0	10	10	13	8	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	6	75.6	......	92	7	52	29	30	4.02	......	1.75	0	9	9	17	5	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	76.8	+2.1	97	4†	50	29	38	4.41	+0.78	2.34	0	7	20	2	9	......	Sisters of Loretto.
Scott	Kenton	900	18	76.6	+1.5	98	5	51	30	31	4.63	+1.09	1.24	0	12	14	13	4	s.	E. B. Wilson.
Shelby City	Boyle	1087	21	76.6	+2.3	96	18†	50	31	39	2.96	−0.17	0.88	0	8	18	11	2	sw.	H. F. Ewing.
Shelbyville	Shelby	825	26	77.4	+1.9	99	7	48	29	40	3.32	+0.29	1.25	0	8	17	5	9	sw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	75.7	+1.3	94	4†	47	29	36	4.22	+0.50	2.40	0	6	16	9	6	sw.	E. D. Bourne.
Williamstown	Grant	943	13	76.6	+2.8	97	7	51	29	32	4.89	+0.75	1.56	0	10	12	11	8	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	77.3	+2.4	96	2	55	24	35	6.93	+2.16	1.95	0	14	12	15	4	e.	Mrs. Sabina E. Hall.
Berea	Madison	1070	14	75.3	+0.7	93	6†	49	24	38	1.92	−3.02	0.90	0	5	15	7	9	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	......	......	......	......	......	......	......	6.88	+2.78	2.40	0	16	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	......	......	......	......	......	......	......	5.68	+1.64	1.27	0	11	11	10	10	......	J. V. Oldham.
Farmers	Rowan	668	9	75.0	+1.2	95	5	52	24	33	6.13	+1.31	1.23	0	11	19	0	12	w.	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	7.83	......	2.14	0	14	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	1	......	......	......	......	......	......	......	4.89	......	3.30	0	11	......	......	......	sw.	C. R. Lee.
Louisa	Lawrence	584	11	......	......	......	......	......	......	......	5.76	+2.11	1.56	0	10	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	4	......	......	......	......	......	......	......	6.83	......	0.91	0	14	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	76.6	+0.9	98	3†	52	24†	38	6.52	+2.54	1.50	0	15	12	10	9	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	75.8	+1.4	90	5†	53	25	30	3.37	+0.16	0.98	0	10	19	12	0	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	75.2	+1.3	94	6	49	29	34	6.08	+2.14	1.65	0	14	15	4	12	ne.	W. R. McKee.
Pikeville	Pike	634	9	......	......	......	......	......	......	......	5.96	+2.44	1.22	0	11	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	76.8	−1.2	94	19	53	24†	32	3.73	+0.53	2.00	0	11	18	8	5	s.	J. W. Crooke.
Weeksbury‡‡	Floyd	1216	2	76.1	......	92	7†	54	31	35	4.07	......	2.24	0	7	24	3	4	......	O. A. Lund.
Williamsburg	Whitley	939	19	76.8	+0.7	92	11	52	25	34	4.34	−0.18	0.85	0	17	11	7	13	s.	N. C. Jones.
State averages and extremes				77.0	......	101	4†	47	29	44	4.25	......	3.30	0	9	14	10	7	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are use in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky.

Daily Precipitation for August, 1916.

Stations		Day of month																														Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
eaver Dam ‖	G														.35		.12		.37					T				[illegible]					1.60
landville	M		.08		T.				1.27					.12			.31				T		T					.18	.04				[illegible]
alhoun	G	T							.02	T.		T	.80	.20	.32	.02	.85		.16									.75	.09				3.21
arlington ‖	G			.02									.05	.33	.16		.42							T					.35				1.33
opkinsville	C								T	.10			.15	.25	.30		.10		T.					T					1.30				2.20
larion	O		.95						.21			T.	2.55	.62		T	.66	T										.91					5.90
wensboro ‖	O			T					.50	.02			T	.28	.04	.30	.17							.04				.50	.43				2.28
aducah	O								1.00						.08		.32							.15					1.00				2.55
ussellville												.19	.36	.16										.07									0.78
Central Division.																																	
lpha	C						T.	.47				2.76	T.	T	T	2.75	.50	.55						T									7.03
nchorage	O					T.				1.20						1.26					.10		.05	.88				.35	.28				4.12
ardstown	S				1.30					2.40			1.40				.50							T.					.10				5.70
owling Green	G		.40	.02	.40				.05				.23	.78	.12	.02	.23	.10							T				.33				2.68
urnside	C			T.	T.	T.			1.42		.06		.73	.06	T.	.04	1.94					T.			.05				.12	T			4.42
loverport ‖	O	.80			.03				.70	1.40	.12		.32	.02	.01	.07	.80			T.				T.					.16	.26			4.69
dmonton	G																																
ubank	C				.30					.08			.08		.10	.02	1.40					.12			.57								2.67
rankfort	K				.87	.15	.08			.60	.04		.04			2.00	T.							.36				.25	.12				4.51
ranklin	G	.28		1.14					.39	T.			.70	.45			T.	.12											.29			.12	3.49
reensburg	G				.01				.03				1.83	.22		.01	2.35		.06					.30	.12				.03				4.96
igh Bridge	K	.08		.80	.10	.08				1.98	.07		.05			2.15	.40	.03						.15	.08			.14	.05				6.16
rvington	O		1.15						T.	T.		T.			T.	T.	1.10							T.				T					2.25
eitchfield	G									T.					.05	*	1.00		.02	.01				.04				.18					1.30
exington ***	K	.12			T.				.12	.01	.02	.40				1.44	.01							.04				.15	.03				2.34
oretto	S		.04	1.44	.10				2.70	2.34	T.	.06	T	T.	T.	.68	.57	.02		T.				.09					.15		T		8.19
ouisville***	O		T.						.50	.46		.01		T.	.06	1.30	.01		T		T.			.33			.19	.16	.04				3.06
Do (Cherokee Park)	O		.35							.70				T.		1.75	.10	.04	.04					.60				.21	.23				4.02
John	S			.09	.02					2.34	.43						1.30	.03							T.				.20				4.41
cott	L	.06		T.	.12				.14	.70	.03		.65			.67					.06	.16	T.	.37			T	.43	1.24				4.63
helby City	K		T.							.67	.38	.14		.15		.88	.30							.40					.04				2.96
helbyville	S	.01								.60	.59					1.25	.05							.32				.32	.18				3.32
aylorsville	S								T.	.77		.79		T.		2.40	.06							.19				.01	T.				4.22
illiamstown	L	.02			.33					1.56	T		.76			.55	.79					.04		.22				.25	.37				4.89
Eastern Division.																																	
eattyville ‖	K			1.19	.50	T.	.30	.50	.14	.18	1.95	.11	.17	T.	.03	1.10	.44	T.							.10			T.	.22	T.			6.93
erea	K					.55						.90		.21		.02	.24												T.				1.92
atlettsburg	B	.16				1.06	T.	.16	.04	2.40	.24		.20	.82	T.	.16	.46	.16			.26			.08	.50			.02	.16	T.			6.88
almouth	L	.07				.50				1.27	.07		.31			.27	.37					.83		.18				.80	.41				5.08
armers	L	T.		T.		1.17		1.07	T.	T.		1.23	.40	T.		.42	.35	.89			T.			.09	.34	T.	T.	.05	.12	T.			6.13
azard	K																																
ackson	K	.15			.08	.44	.35	.14		1.88	T	.95	.38	.10	.24	2.14	.14				.59				.25								7.83
ondon	C			.08	.12	.10	.21		.08	.45			.15		.07		3.30	.18							.15								4.89
ouisa	B					.10				.50			.39	1.10		.28	1.56	.38			.51				.67				.27				5.76
anchester	K			.91	.79	.63			.75	.64	.88	.61			.43	.12						.22	.11		.52				.17	.05			6.83
aysville ‖	O				.20	1.50		.87	.01	.25	.09		.06	.30		.05	.51	.97						.93	.05			.52	.20				6.52
iddlesboro	C			.86	.18		.05	.98	.18	.04			.65	.20	.02		.21																3.37
ount Sterling	L	.06		1.47	.07	1.05	T.	.02	T.	.03	T.		.95			1.65	.48	.05			T.			.10	.03			.08	.04				6.08
ikeville	B					.52		.14	T.		.32	.84	.76	.52		1.20	1.22					.24			.12				.08				5.96
ichmond	K	.02		.04	.01		.05			.32			.06		.08	2.00	1.13							T	.04				.03				3.73
eeksbury	B		.87			.10	.10		T.		.20					2.24				.10				.46									4.07
illiamsburg ‖	C			.60	.48	.04	.50	.85	.20	.01	.09	T.	.48	.20	.40	.04	.22	T.	.02						.04				.12	.05			4.34

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of bservation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

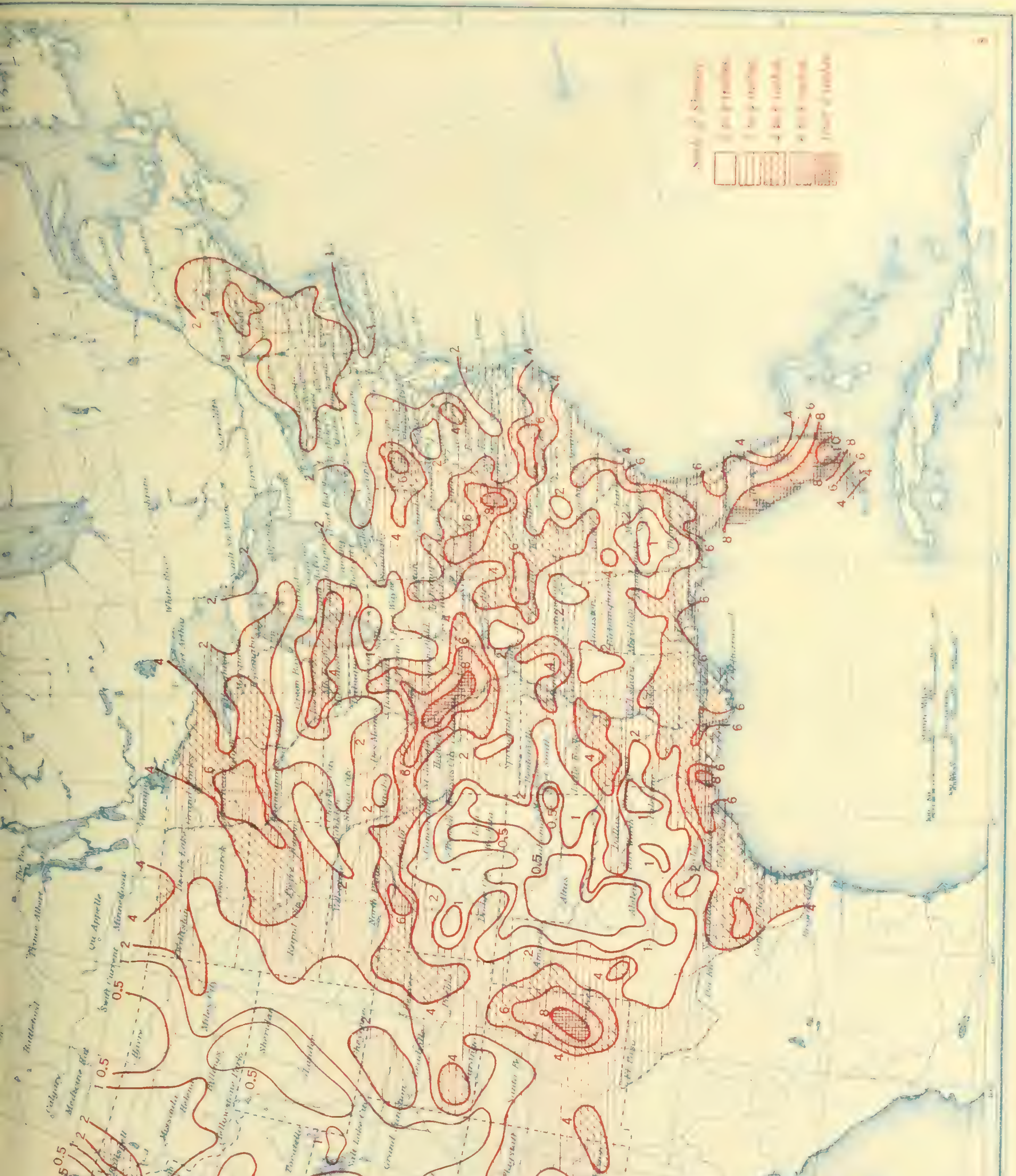
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn-
ee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	89	86	87	80	91	92	92	92	87	92	96	82	82	82	84	88	93	95	94	96	92	91	81	84	89	87	86	79	80	85	90	87.
	Minimum	72	70	70	72	74	72	71	76	72	74	75	75	71	63	76	72	73	74	72	71	72	68	68	54	57	62	62	63	49	50	54	67.
Blandville	Maximum	92	83	91	91	90	92	95	86	80	88	92	89	84	86	88	86	91	92	93	94	89	89	78	82	89	90	79	76	78	81	88	87.
	Minimum	74	71	70	74	74	74	76	74	73	73	75	73	73	67	73	71	72	74	75	73	70	73	64	57	59	65	64	59	55	54	59	69.
Calhoun	Maximum	91	87	94	95	93	95	97	89	86	91	97	84	82	81	85	92	96	97	96	96	93	90	81	86	90	83	82	78	80	85	90	89.
	Minimum	72	69	69	72	73	72	70	74	71	74	74	72	71	61	71	70	72	73	72	70	70	69	65	55	58	62	63	59	49	51	55	67.
Earlington §§	Maximum	93	88	97	101	96	98	101	91	89	95	100	84	83	87	90	92	98	98	101	100	98	96	83	87	94	94	73	82	83	88	95	92.
	Minimum	74	70	70	75	75	73	71	73	72	73	75	73	72	64	69	70	72	73	73	69	70	70	67	53	57	62	64	62	50	50	51	67.
Hopkinsville §§	Maximum	90	86	93	94	93	91	95	87	85	90	95	95	80	85	87	89	94	95	95	98	92	92	79	84	89	91	85	77	78	84	89	88.
	Minimum	75	70	70	73	75	73	72	74	71	72	73	79	73	65	72	73	73	73	74	72	72	67	67	55	57	58	62	63	52	53	55	68.
Marion	Maximum	92	86	91	94	90	93	97	87	85	90	95	86	81	85	88	89	93	95	94	95	92	90	80	85	89	90	78	76	79	82	89	88.
	Minimum	72	72	70	74	74	74	78	75	70	82	75	70	70	63	72	71	77	80	74	75	75	71	64	60	67	63	63	59	52	53	59	69.
Owensboro §§	Maximum	89	85	93	95	94	93	96	86	86	89	91	81	79	78	82	87	92	94	94	95	92	90	79	83	88	87	75	76	77	80	86	86.
	Minimum	74	70	69	73	74	72	72	74	73	74	75	74	73	63	67	72	71	73	73	72	71	71	66	55	68	63	65	61	55	53	57	68.
Russellville	Maximum	90	88	91	93	90	95	97	84	86	93	95	98	82	86	89	90	94	95	94	96	93	93	82	84	90	92	87	78	80	82	92	89.
	Minimum	72	67	70	69	72	72	72	72	71	71	72	71	71	76	70	72	71	71	70	70	70	66	67	52	55	59	58	49	49	51	56	66.
Central Division																																	
Alpha	Maximum	85	85	84	86	87	88	80	83	76	83	86	84	81	80	82	76	82	86	85	85	85	82	71	74	80	84	81	68	75	78	82	81.
	Minimum	71	67	72	73	75	74	73	75	72	73	75	71	74	66	74	73	72	72	69	72	67	68	69	57	56	60	62	65	57	54	55	68.
Anchorage	Maximum	88	92	94	95	94	94	95	91	86	91	90	85	78	79	83	89	92	94	95	95	93	91	80	82	88	88	78	77	80	85	89	88.
	Minimum	70	67	69	71	72	70	69	75	72	69	72	69	64	55	66	69	66	69	67	68	70	65	60	52	56	61	59	56	48	49	56	64.
Bardstown §§	Maximum	92	95	96	96	96	98	98	86	86	95	87	91	85	82	82	91	94	97	99	98	98	94	85	88	92	90	81	80	84	88	93	90.
	Minimum	71	71	73	71	75	74	73	75	72	72	74	73	70	60	65	71	71	65	68	73	73	68	68	54	60	62	65	60	50	52	55	67.
Bowling Green §§	Maximum	97	91	92	95	95	97	98	97	87	94	99	99	86	90	90	89	95	96	96	96	95	83	88	88	93	93	80	84	87	92	92.
	Minimum	75	63	70	70	65	73	73	75	72	72	72	72	71	64	64	70	72	73	72	73	72	68	68	55	57	61	64	62	51	53	54	67.
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	85	90	89	90	90	94	91	85	82	90	92	89	86	84	83	88	91	90	91	90	92	88	78	80	86	88	83	71	81	84	87	86.
	Minimum	68	68	70	71	70	70	71	69	70	70	70	70	70	59	61	60	68	65	64	60	65	65	64	48	48	55	59	62	51	48	49	63.
Frankfort	Maximum	92	92	92	92	94	94	96	94	85	90	92	92	84	80	82	87	91	92	93	91	92	90	86	81	86	87	82	76	78	80	85	88.
	Minimum	71	67	71	72	72	72	73	75	72	71	73	72	70	56	65	72	70	67	68	71	70	67	63	53	58	61	62	57	50	52	54	66.
Franklin	Maximum	89	87	88	91	91	92	93	85	86	89	92	89	80	85	89	88	91	92	90	91	90	90	78	81	85	89	83	74	77	81	88	86.
	Minimum	72	69	72	71	73	73	74	74	72	71	73	70	71	78	76	74	72	72	73	73	71	68	67	56	60	62	64	62	53	54	58	68.
Greensburg §§	Maximum	90	93	95	95	95	98	97	88	85	95	94	91	86	84	84	88	92	92	93	90	91	90	76	81	86	88	83	74	81	83	88	88.
	Minimum	70	67	71	70	70	70	73	73	72	68	71	70	70	62	69	70	69	69	68	70	68	65	67	53	55	59	61	62	49	49	53	65.
Irvington	Maximum	88	86	90	93	92	91	94	89	86	90	94	84	81	80	81	88	91	93	92	92	91	91	77	83	87	85	79	74	77	82	87	86.
	Minimum	72	70	72	73	76	74	72	76	73	73	73	74	70	59	70	72	71	73	72	72	73	69	62	54	59	64	65	59	52	52	57	67.
Leitchfield	Maximum	87	88	90	93	93	95	95	87	85	89	95	86	83	83	82	89	93	92	93	94	89	87	79	83	88	87	75	76	79	84	89	87.
	Minimum	71	68	71	72	72	71	70	74	73	71	71	72	68	61	68	71	72	72	71	71	70	67	66	53	56	61	63	60	51	51	54	66.
Lexington	Maximum	85	89	88	89	89	91	90	82	79	88	89	86	78	79	79	84	88	91	93	90	92	87	73	78	84	83	78	69	77	80	84	84.
	Minimum	70	68	72	73	75	75	74	72	70	72	69	71	63	56	64	71	71	72	76	70	72	73	63	60	62	68	62	55	54	61	64	67.
Loretto	Maximum	87	89	92	91	91	93	93	86	83	89	92	87	83	80	81	87	90	93	93	92	91	89	77	82	86	86	79	74	79	83	..	*86.
	Minimum	68	67	72	71	73	71	72	71	71	70	73	72	68	59	68	70	71	69	68	70	67	64	65	51	57	61	64	59	49	48	..	*66.
Louisville	Maximum	85	90	92	94	94	94	95	90	86	89	92	85	77	77	81	89	91	93	95	95	91	91	76	83	88	85	75	76	79	82	88	87.
	Minimum	73	70	75	76	78	78	77	76	73	74	76	74	66	60	66	73	71	74	72	74	76	73	64	60	67	62	62	60	55	58	61	69.
Do. (Cherokee Park)	Maximum	88	84	89	91	91	91	92	89	85	89	88	83	80	71	80	84	88	90	91	91	88	88	81	79	85	82	75	74	76	80	84	84.
	Minimum	71	66	71	72	75	73	72	75	73	71	74	73	69	55	65	71	68	71	69	70	72	69	63	55	59	64	61	57	52	52	54	66.
St. John §§	Maximum	86	88	94	97	96	96	97	93	85	89	94	89	84	81	82	90	94	93	94	93	91	92	79	85	90	90	76	74	79	84	91	88.
	Minimum	70	67	71	71	71	70	69	74	71	71	72	72	68	60	54	60	70	70	69	71	71	64	66	53	56	59	64	58	50	52	53	65.
Scott	Maximum	86	93	96	95	98	97	97	88	85	93	96	86	75	80	76	90	94	93	96	95	92	91	77	84	88	84	76	72	78	82	84	87.
	Minimum	68	65	70	73	74	75	73	75	71	72	70	71	66	52	61	68	67	64	69	70	69	69	63	53	62	66	60	55	52	51	55	65.
Shelby City	Maximum	85	87	90	92	92	95	90	84	80	90	91	90	85	83	82	89	94	96	96	92	94	92	79	84	88	90	83	75	82	85	89	87.
	Minimum	70	67	72	72	74	75	72	72	71	72	72	71	69	58	67	70	69	67	65	70	65	65	65	51	55	59	60	58	51	52	50	65.
Shelbyville §§	Maximum	89	95	96	97	97	97	99	94	87	94	93	88	80	81	82	89	95	97	98	97	95	94	80	85	91	88	76	76	81	86	91	89.
	Minimum	71	67	68	71	73	72	71	74	72	71	71	71	69	53	59	67	68	70	68	70	71	67	63	51	54	61	60	56	48	50	51	64.
Taylorsville	Maximum	85	87	92	94	93	93	94	88	88	90	90	86	77	77	79	86	88	91	91	90	88	88	84	80	86	86	80	72	76	80	86	86
	Minimum	70	68	70	72	72	71	70	75	72	71	71	72	69	56	67	72	70	69	68	71	70	65	65	51	57	58	62	58	47	49	50	65.
Williamstown §§	Maximum	91	94	94	94	96	96	97	90	85	91	90	90	78	79	79	90	95	96	95	96	94	90	78	86	88	86	78	77	82	85	88	88.
	Minimum	62	63	64	72	73	72	73	73	70	71	72	71	70	51	58	60	67	68	68	68	69	69	66	54	56	64	60	54	51	53	57	64
Eastern Division																																	
Beattyville §§	Maximum	84	96	89	93	95	95	92	91	87	93	94	90	84	82	87	90	92	92	95	91	95	91	75	84	89	90	89	73	86	86	91	89.
	Minimum	69	70	68	70	69	71	70	68	70	70	70	69	73	56	61	67	70	69	69	66	68	68	66	55	56	61	62	59	58	58	56	65.
Berea	Maximum	82	88	91	91	92	93	90	83	83	91	92	89	83	80	86	87	90	93	89	91	93	88	80	87	87	89	88	72	73	83	87	86.
	Minimum	69	68	68	68	68	68	68	68	68	68	68	68	67	56	63	70	70	65	66	66	65	66	64	49	50	60	63	57	52	60	52	63
Farmers	Maximum	88	93	90	90	95	94	86	85	82	88	85	87	78	78	81	85	92	93	94	85	85	90	82	81	87	78	84	75	80	82	86	85
	Minimum	70	63	67	62	70	74	70	72	74	73	69	67	69	52	64	68	70	66	65	66	66	66	65	52	54	58	62	56	55	56	53	64.
Maysville §§	Maximum	92	96	98	94	98	95	97	90	88	95	92	89	79	81	80	92	94	95	98	96	96	94	79	85	90	90	83	76	82	86	90	90.
	Minimum	70	61	65	69	70	71	69	72	70	71	72	69	70	52	54	61	65	65	66	66	68	65	63	52	52	60	61	54	52	53	54	63
Middlesboro	Maximum	88	86	86	88	90	89	87	85	83	87	90	86	84	82	85	84	85	89	88	89	89	85	79	78	83	87	87	74	80	82	85	85
	Minimum	71	70	67	67	70	72	70	72	69	70	71	69	68	66	72	72	70	70	68	65	67	66	67	58	53	59	60	65	58	59	57	66
Mount Sterling §§	Maximum	85	91	89	88	92	94	92	86	84	92	92	90	76	80	84	87	89	90	93	93	92	89	74	80	87	88	82	68	79	81	86	86
	Minimum	69	63	63	70	68	68	71	72	72	72	72	70	71	54	62	65	70	66	66	67	66	67	64	51	59	62	61	55	49	52	52	64
Richmond §§	Maximum	86	90	91	92	90	92	93	83	81	91	92	88	82	81	84	87	91	93	94	93	93	89	75	83	87	87	82	73	82	87	88	87
	Minimum	70	68	71	71	74	73	73	72	70	71	72	70	71	56	68	70	70	70	69	68	68	68	68	53	59	65	63	57	53	55	56	66.
Weeksbury	Maximum	86	90	90	90	90	91	92	92	85	86	92	89	87	86	88	85	92	91	90	92	90	89	85	78	90	89	82	80	81	82	89	87
	Minimum	70	67	66	69	69	69	71	69	70	72	69	67	62	56	66	57	68	66	67	65	61	65	69	59	56	64	60	57	56	62	54	64
Williamsburg §§	Maximum	88	90	88	90	91	91	89	90	88	91	92	89	86	84	86	85	90	91	91	88	91	88	78	82	86	88	88	79	81	84	88	87
	Minimum	71	70	71	68	71	72	69	71	70	68	70	70	69	61	68	70	69	70	67	68	67	65	67	57	52	59	65	64	57	56	55	66.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

* [illegible], etc. indicate respectively 1, 2, 3, etc. days missing from record.



Prince Albert
The Pas
Battleford
Qu'Appelle
Swift Current
Calgary
Medicine Hat
Kamloops
Seattle
Spokane
Bismarck
Helena
NO RAIN
NO RAIN

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

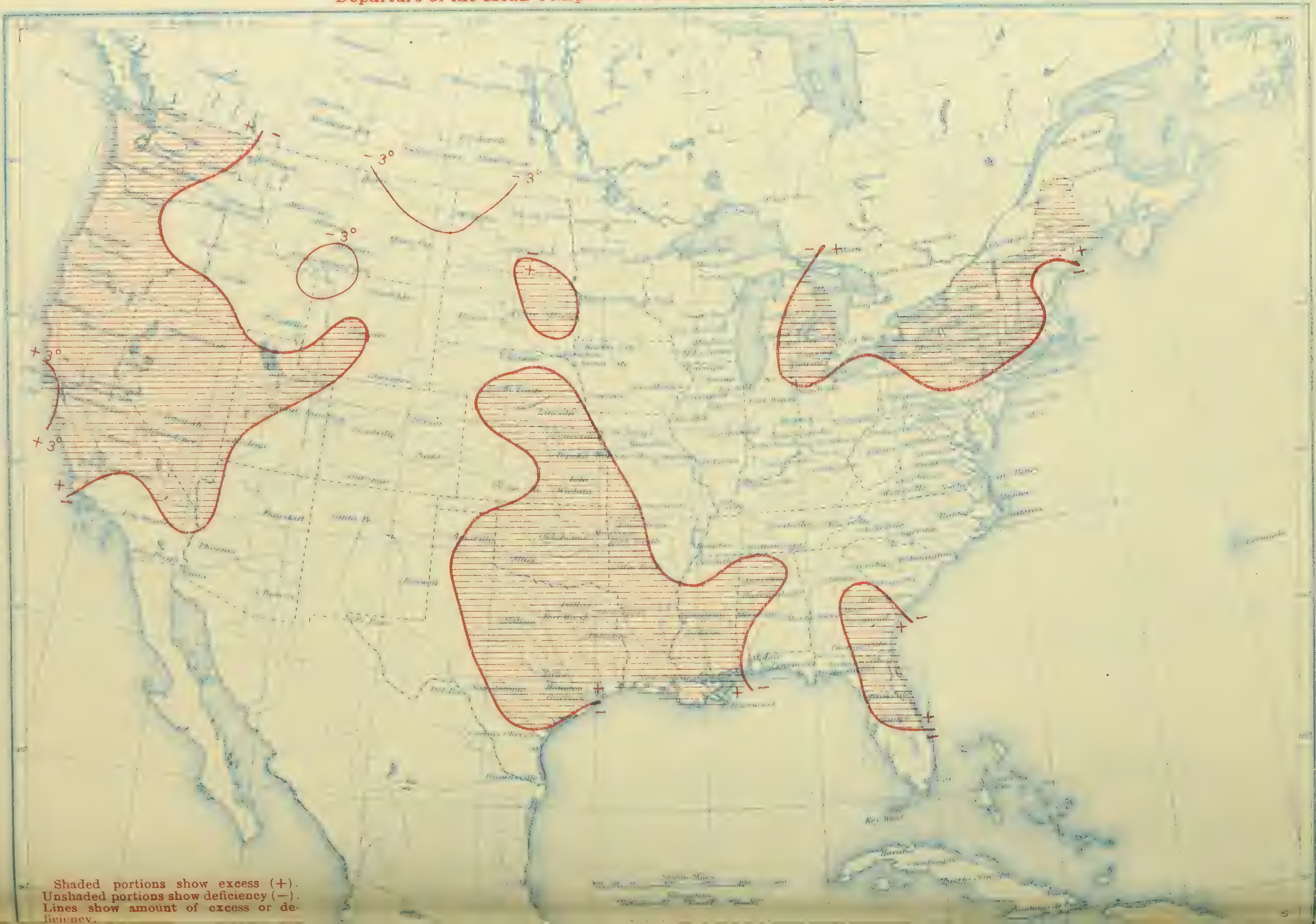
KENTUCKY SECTION

SEPTEMBER, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 27, 1916

Departure of the Mean Temperature from the Normal, September, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXI. LOUISVILLE, KY., SEPTEMBER, 1916. No. 9.

GENERAL SUMMARY.

The leading features of the month's weather were the large number of clear, bright days, and the long period of nearly four weeks when only light rains occurred, which scarcely interrupted outdoor work. Temperatures during the first two weeks were generally above normal, but a decided change to colder occurred on the 15th, ushering in a period of unseasonably cool weather lasting until the 24th. Frosts occurred on the morning of the 16th generally over the State, being heavy in some central counties, but light in most places. Frost was again general on the 19th, and heavy at a few central stations, minimum temperatures reaching 32° in a few places. The last two days were also abnormally cool, with light frosts again general over the State on the 30th. As a rule these frosts caused but slight injury to crops, the only damage of consequence being to tobacco growing on lowlands in a few localities. However, the apparent danger from frost caused farmers to accelerate the harvesting of this crop, more than three-fourths of which was in the barns and curing nicely by the 26th, the work being greatly facilitated by the bright, clear weather.

Heavy showers occurred on the 1st and 2d, and heavy general rains on the 28-29th. During the intervening period what showers occurred were mostly light and local, and plowing was delayed on account of dry ground, especially in the central counties; but after the rains of the 28-29th this work proceeded rapidly.

PRESSURE.

Long, and mostly shallow, troughs of low pressure drifted across the central Mississippi and Ohio valleys in the periods, 7-8th, 12th, 21st-22d, and 27-28th. The main center of all these low pressure formations passed over the Lake region well to the north. The one of the 27-28th was the deepest and most important. The course of no other well-defined low pressure formation came near this State. High pressure areas dominated in the periods, 2d-5th, 9-10th, 13-20th, 23d-26th, and 29-30th.

The mean sea-level pressure, based on the records of two stations, was 30.09 inches. The highest was 30.38 inches on the 30th and the lowest 29.76 inches on the 27th, both at Louisville.

TEMPERATURE.

The mean temperature for the State, based on the reports from 39 stations, was 67.2°, which is 3.4° below normal. With the exception of September, 1890, this is the lowest average temperature for September since State averages were established. Maximum temperatures during the first two weeks were frequently above 90°, but the nights were generally quite cool throughout the month, due in part to the clear weather and free radiation. On the 16th, 17th, 19th, 20th and 30th, minimum temperatures ranged from near freezing to 40°. Such persistently low night temperatures rarely occur in Kentucky in September. The monthly extremes were 98° at Earlington on the 7th, 10th and 27th; and 32° at Loretto on the 16th, at Beattyville, Berea and St. John on the 19th, and at Maysville on the 30th.

PRECIPITATION.

The average precipitation for the State, as determined from reports from 49 stations, was 3.48 inches, which is 0.78 inch above normal. Most of the rain occurred in the periods 1st-2d and 28-29th. Showers were general on the 8-9th, 14-15th and 21st-22d. At the various stations monthly amounts ranged between 1.62 inches at Scott, and 7.80 inches at Russellville. In most of the southern border counties monthly amounts ranged between 4 and 6 inches, while in Logan and Warren counties they were between 7 and 8 inches. Over the rest of the State amounts were somewhat irregular, but ranged generally between 2.5 and 4.5 inches. Noteworthy instances of excessive 24-hour rainfalls were: 3.45 inches at Bowling Green and 6.20 inches at Russellville on the 28th.

WIND.

The total wind movement at Louisville was 7,554 miles, and at Lexington 8,547 miles, with average hourly velocities of 10.5 and 11.8, respectively. The maximum velocity for five minutes at Louisville was at the rate of 46 miles per hour from the south, and at Lexington 39 miles per hour from the southwest, on the 27th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 74 per cent, at 2 p. m. 47 per cent and at 7 p. m. 55 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine for both Louisville and Lexington was 78. The total hours of sunshine at Louisville is the greatest on record for September, except in 1903.

MISCELLANEOUS.

September 11.—A farmer was killed by lightning in Graves County.

September 15.—Considerable damage to crops and telephone and telegraph lines was caused by a local storm in Letcher County.

September 28.—Damaging local storms occurred in Todd, Logan and Warren counties. Two barns were burned by lightning in Todd County. An excessive rain in Warren County flooded business houses and manufacturing plants in Bowling Green, and caused much damage to crops still in the fields.

RIVERS.

The rivers were at low stages during the month. In the Ohio River navigation was difficult except where the river is controlled by locks and dams.

ERRATA

August, 1916.—Lexington—minimum temperature on the 22d should be 72, and mean minimum 67.6.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average	Departure from 25-year normal.	Highest.	Lowest.	Monthly average	Departure from 25-year normal.	No. of days with .01 in. or more
1889	72.1	+1.5	101	36	1.23	−1.47	
1890	67.0	−3.6	95	36	2.71	+0.01	
1891	69.5	−1.1	97	42	1.89	−0.81	
1892	68.5	−2.1	93	38	2.68	−0.02	
1893	69.6	−1.0	99	35	3.24	+0.54	
1894	71.7	+1.1	98	37	2.71	+0.01	
1895	73.4	+2.8	101	27	1.10	−1.60	3
1896	68.6	−2.0	100	30	3.77	+1.07	7
1897	72.8	+2.2	105	31	0.21	−2.49	1
1898	73.4	+2.8	103	42	4.36	+1.66	9
1899	68.7	−1.9	105	27	1.66	−1.04	5
1900	71.6	+4.0	102	35	2.25	−0.15	6
1901	68.1	−2.5	98	33	3.57	+0.87	6
1902	67.3	−3.3	97	29	4.01	+1.31	10
1903	69.1	−1.5	100	32	0.91	−1.79	4
1904	71.1	+0.5	99	34	2.58	−0.12	8
1905	70.2	−0.4	95	36	2.61	−0.09	6
1906	73.0	+2.4	95	45	6.15	+3.45	13
1907	69.1	−1.5	102	35	3.00	+0.30	6
1908	71.6	+1.0	101	30	1.03	−1.67	3
1909	67.7	−2.9	97	32	2.51	−0.19	6
1910	71.8	+1.2	99	38	4.41	+1.71	4
1911	74.3	+3.7	99	46	3.71	+1.01	10
1912	71.0	−0.4	103	33	2.80	+0.10	7
1913	69.6	−1.0	106	29	2.49	−0.21	9
1914	67.8	−2.8	97	36	2.96	+0.26	6
1915	70.7	+0.1	99	32	3.32	+0.62	7
1916	67.2	−3.4	98	32	3.48	+0.78	6

Climatological data for September, 1916.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	68.4	− 2.8	94	7	35	30	42	2.74	+0.13	1.79	0	5	18	9	3	n.	W. T. Austin.
Blandville	Ballard	445	34	68.6	− 2.4	91	6†	39	30	36	2.46	−0.52	1.21	0	6	14	13	3	ne.	E. W. Horr.
Calhoun	McLean	437	12	69.0	− 3.8	94	6†	35	16	43	2.72	+0.14	1.64	0	7	22	6	2	sw.	W. A. Taylor.
Earlington	Hopkins	420	25	70.0	− 0.5	98	7†	34	30	51	2.14	−0.91	0.52	0	9	22	1	7	se.	Brick Southworth.
Greenville	Muhlenburg	519		68.7		96	7	35	16	45	2.88		0.90	0	7					C. R. Lovell.
Hopkinsville	Christian	524	19	68.0	− 3.9	93	7	38	16	41	4.22	+1.19	2.20	0	8	19	2	9	w.	W. F. Randle.
Marion	Crittenden	571	17	^{d}69.4	− 2.8	93^{g}	7	35	30	32^{g}	2.58	−0.46	1.30	0	3	18	10	2	sw.	B. C. Paris.
Mayfield	Graves	364		67.8		93	8	34	30	41	5.15		1.60	0	6					J. N. Davis.
Owensboro	Daviess	479	18	68.2	− 2.5	91	7	38	16	42	3.40	+0.58	1.70	0	5	21	5	4	se.	Henry S. Berry.
Paducah	McCracken	341	27	71.4	− 2.8	96	6†	40	30	41	2.19	−0.80	0.94	0	5	24	0	6		E. Futrell, Jr.
Russellville	Logan	590	5	68.2		96	7	34	30	48	7.80		6.20	0	4	23	3	4		E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	22																	W. W. Hicks.
Anchorage	Jefferson	700	14	66.2	− 2.9	93	7	35	30	43	2.88	+0.07	1.86	0	3	24	3	3	sw.	C. E. Barret.
Bardstown	Nelson	637	18	69.8	− 2.1	96	7	36	16	50	2.07	−0.83	1.00	0	6	20	2	8	se.	Chas. M. Talbott.
Bowling Green	Warren	500	26	68.1	− 3.9	96	6†	38	16†	45	7.42	+4.29	3.45	0	8	21	7	2	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24								5.81	+2.55	2.30	0	9					C. L. Hurt.
Cloverport	Breckenridge	375	2								2.61		0.85	0	9					W. A. Cockerill.
Eubank	Pulaski	1177	21	64.8	− 3.9	91	7	33	20	46	2.89	−0.63	1.00	0	5	15	5	10	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	66.2	− 2.4	91	7	37	19	37	4.85	+2.01	2.14	0	6	20	3	7	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	67.7	− 4.3	91	6†	38	30	36	4.38	+1.02	2.35	0	7	9	19	2	nw.	J. E. Newman.
Greensburg	Green	581	23	65.8	− 4.2	92	7	33	16†	44	3.68	+0.71	1.16	0	6	17	4	9	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13								4.13	+1.25	1.72	0	8					Miss Lulu Wood.
Irvington	Breckenridge	646	18	67.8	− 2.6	92	7	37	16	36	2.61	−0.38	0.93	0	6	23	3	4	sw.	W. J. Piggott.
Leitchfield	Grayson	635	20	67.4	− 2.4	92	7	35	16	39	2.94	−0.70	1.28	0	5	22	3	5	sw.	John E. Stone.
Lexington	Fayette	989	31	66.7	− 1.2	89	7	39	30	28	2.75	+0.33	1.25	0	6	21	5	4	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	66.8	− 3.4	92	7	32	16	46	2.82	+0.05	1.32	0	10	20	4	6		Loretto Academy.
LOUISVILLE	Jefferson	525	43	68.3	− 1.6	92	7	40	30	31	4.12	+1.49	3.06	0	6	19	5	6	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	6	66.4		89	6	36	30	42	4.68		3.20	0	8	17	8	5	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	66.3	− 2.8	94	7	32	19	43	3.08	−0.04	0.90	0	9	24	0	6		Sisters of Loretto.
Scott	Kenton	900	18	65.4	− 4.1	89	7	35	16†	38	1.62	−0.93	0.47	0	10	18	7	5	s.	E. B. Wilson.
Shelby City	Boyle	1087	21	66.7	− 2.9	93	7	34	20	47	3.35	+0.33	1.32	0	8	22	6	2	nw.	H. F. Ewing.
Shelbyville	Shelby	825	26	66.0	− 3.5	94	6†	35	16†	47	3.11	+0.22	1.76	0	8	20	3	7	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	65.2	− 3.0	90	6†	34	19†	41	4.25	+0.80	1.94	0	8	22	3	5	sw.	E. D. Bourne.
Williamstown	Grant	943	13	65.6	− 2.8	91	6†	35	30	43	2.90	+0.19	1.76	0	8	15	7	8		Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	66.4	− 3.6	95	7	32	19	50	3.70	+0.82	1.43	0	6	15	12	3	e.	A. H. Bowman.
Berea	Madison	1070	14	66.6	− 2.7	91	7	32	19	47	3.82	+1.16	1.65	0	5	24	4	2	ne.	C. F. Rumold.
Catlettsburg	Boyd	534	27								3.16	−0.49	1.02	0	5					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26								3.61	+1.64	1.26	0	7	17	4	9	s.	J. V. Oldham.
Farmers	Rowan	668	9	64.4	− 4.1	91	7	34	19†	41	3.30	+0.21	1.85	0	5	26	0	4	w.	Mrs. Lurlene Triplett.
Hazard	Perry		1																	
Jackson	Breathitt	776	4								3.84		1.50	0	6					Jas. L. McCoy.
London	Laurel	1190	1								2.99		0.94	0	7					C. R. Lee.
Louisa	Lawrence	584	11								2.58	+0.06	0.97	0	5					G. M. Guerin.
Manchester	Clay	1400	4								2.75		0.94	0	4					Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	64.4	− 5.2	95	6	32	30	47	3.35	+0.72	0.84	0	7	21	4	5	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	65.8	− 3.0	90	7	38	16†	35	2.93	+0.18	1.28	0	7	23	7	0		B. H. Perkins.
Mount Sterling	Montgomery	930	25	64.8	− 2.8	91	6†	34	19	41	4.29	+1.40	2.12	0	7	18	4	8	w.	W. R. McKee.
Pikeville	Pike	634	9								3.28	+0.44	1.44	0	6					I. M. Williams.
Richmond	Madison	926	23	67.8	− 2.8	92	7	38	19†	40	4.53	+1.89	2.75	0	5	24	2	4	s.	J. W. Crooke.
Weeksbury ‡‡	Floyd	1216	2	68.1		94	7	40	19†	41	2.32		0.76	0	4	23	1	6		O. A. Lund.
Williamsburg	Whitley	939	19	67.0	− 3.6	92	7	36	19	42	2.93	−0.43	0.71	0	7	19	4	7	s.	N. C. Jones.
State averages and extremes				67.2		98	7†	32	16†	51	3.48		6.20	0	6	20	5	5	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post office address, Nerinx, Ky

Daily Precipitation for September, 1916.

Stations	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
aver Dam‖ G	1.79							.13						.30							.40						.12					2.74
ndville M	.42				.18			.20			.06											.39						[illegible]				[illegible]
houn G	.55	.10						.15						.16							.06	.06						[illegible]				[illegible]
rlington‖ G		.42						.37	.23					.02	.12						.23	.11						.52	[illegible]			[illegible]
enville	.90	.08						.55						.30							.30	.15						[illegible]				[illegible]
pkinsville‖ C	T.	.54	T.						.19					.15	.55						.20	.39						1.05	1.16			4.22
rion O	.65	T.									.63										T.	T.						1.30				[illegible]
yfield	1.40							1.10												.40	.40							1.60	.25			5.15
ensboro‖ O		1.70						T.	.01					T.	.07						T.							.83	.79			3.40
ducah O								.50			.10										.40	.25						.94				2.19
sellville‖	.40													1.20													1.76	4.44				7.80
Central Division.																																
ha C																																
chorage O	1.86	.28						T.													T.							.74				2.88
dstown‖ S	.60							T.	.10						.22							T.	.15					.50	.50			2.07
wling Green‖ G		1.00	.03						.18						.47							.50	.10					1.69	3.45			7.42
nside‖ C		1.03	.04						.05		.40			T.	2.30							.13	.43					.43	1.60	T.		[illegible]
erport‖ O		.85				.01		.01	.02					T.	.09						.07		.17					.78	.61			2.61
bank‖ C	.96														.20								.25					.48	1.00			2.89
nkfort‖ K		1.97					T.	.05	.17						.20							T.						.32	2.14	T.		4.85
nklin G	.76	.20						T.						.22							.13	.69	.03					2.35				4.38
ensburg‖ G		1.16												.66	.11							.28						1.06	1.01			3.68
h Bridge‖ K		1.72	.06						.14						.48							.07	.12					.39	1.15			4.13
ngton O	.93	.30						.06						.17							T.	T.	.22					.93	T.			2.61
chfield G	1.28							.15						.35								.10						1.06				2.94
ington *** K	.82	.43						.01						.40								.09						1.00	T.			2.75
etto S		.70	T.					.06	T.					.07	.03							.26	.30	.02				1.32	.05	.01		2.82
isville*** O	1.79	1.35						.13						.02							.01	T.						.82	T.			4.12
o. (Cherokee Park) O	.19	3.20						.29						.05							.06	.02						.84	.03			4.68
John S	T.	.90						.11	.18					.02	.32							.05	.07					.70	.73			3.08
t L	.46	.16				.31		.05			T.			.02	.01						.05	T.	.06					.47	.03			1.62
by City K	.20	1.22						.10						.14								.26	.03					1.32	.08			3.35
byville‖ S	T.	1.76					.20	.04	.08						.17							.01						.20	.65			3.11
lorsville S	.55	.48				.06	.07							.81								.02	.32					1.94				4.25
iamstown‖ L	.20	1.76					.04		.10						.06							T.	T.					.10	.60	.04		2.90
Eastern Division.																																
tyville‖ K		1.41	.19												.37								.15					.15	1.43			3.70
a K		1.65						.40						T.								.30						1.35	.12			3.82
ettsburg‖ B		.52							1.02						.60								.46						.56			3.16
outh‖ L	T.	1.26					.56		.75					T.	.32								.04					.08	.60	T.		3.61
ners L		1.85		T.				T.	.05						.30							T.	.30	T.				T.	.80	T.		3.30
ard K																																
son K		1.50	.20						.51		T.			1.04									.02					T.	.57	T.		3.84
lon‖ C		.80							.25						.94	.05				.28								.17	.50			2.99
sa B		.97							.33						.68								.10						.50			2.58
chester‖ K									.65						.78								.38						.94			2.75
sville‖ O		.84	T.				.33		.79						.10							T.	.37					.11	.81			3.35
llesboro C		.58					.19	.18						1.28								.10						.50	.10			2.93
nt Sterling‖ L		2.12					.15		.19		T.				.24							T.	.42					.20	.97			4.29
ville‖ B		.06	.24						.46						1.44	.16													.92			3.28
mond‖ K		2.75							T.						.45							T.	.16					.35	.82	T.		4.53
sbury B														.40	.76														.54	.62		2.32
amsburg‖ C		.57	.23						.49						.28							.35	.30					T.	.71			2.93

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of
rvation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

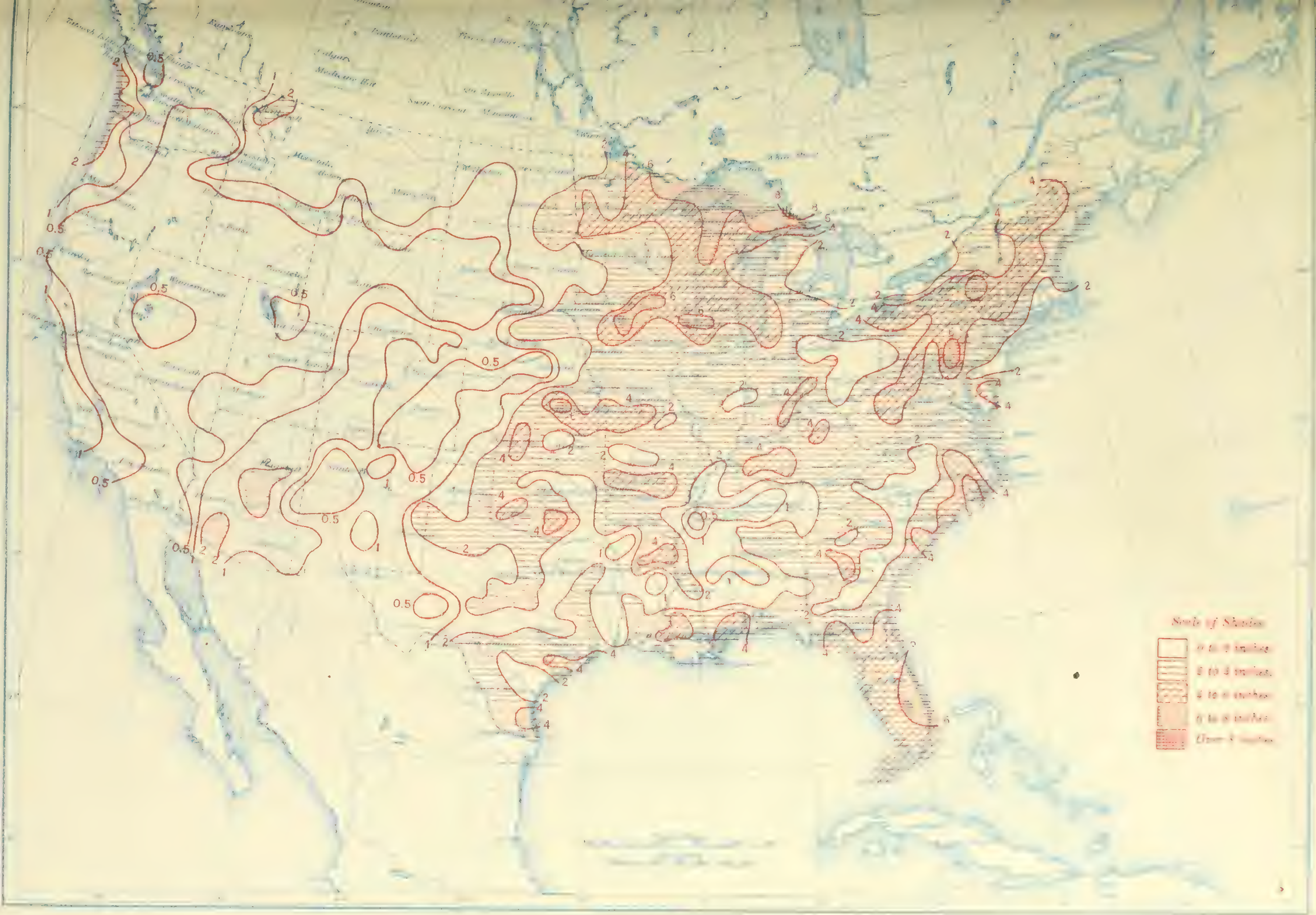
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn.
; (O) Ohio; (M) Mississippi.

Daily temperatures for September, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	81	83	85	89	92	93	94	79	84	89	89	88	87	73	88	71	80	71	73	81	81	76	73	80	86	90	88	68	60	65	..	81.2
	Minimum	69	69	62	61	69	77	74	69	63	59	68	64	57	60	54	36	40	45	36	39	41	51	45	55	49	50	60	64	47	34	..	55.6
Blandville	Maximum	87	80	85	87	90	91	91	81	82	86	85	83	80	74	64	70	77	68	71	81	77	78	70	74	86	87	86	77	59	62	..	79.0
	Minimum	68	68	63	67	69	70	71	69	63	62	70	68	64	61	54	40	45	49	43	45	58	59	48	49	55	63	68	54	41	39	..	58.1
Calhoun	Maximum	87	83	86	88	92	94	94	89	83	91	89	89	89	83	72	73	83	71	75	82	82	78	77	81	87	90	86	80	63	64	..	82.7
	Minimum	67	67	64	59	67	67	69	68	61	57	67	68	57	62	50	35	40	48	40	39	60	52	43	39	48	56	67	58	46	36	..	55.2
Earlington §§	Maximum	92	82	93	93	97	97	98	82	98	95	93	92	94	76	69	77	86	74	78	88	82	79	77	83	92	93	98	69	64	71	..	85.4
	Minimum	60	69	62	62	70	70	71	70	63	59	68	65	58	59	53	35	36	46	37	37	40	52	45	42	48	51	67	64	48	34	..	54.7
Greenville	Maximum	91	82	85	88	92	93	96	89	83	90	90	88	88	84	72	72	81	75	72	82	81	77	74	79	86	90	87	81	72	63	..	82.8
	Minimum	54	68	62	61	60	67	68	68	64	59	67	62	56	63	54	35	39	50	38	37	60	52	46	41	49	55	61	60	47	35	..	54.6
Hopkinsville §§	Maximum	86	83	86	87	90	92	93	78	85	90	88	86	89	73	67	72	80	71	74	80	80	77	73	78	85	88	85	68	59	72	..	80.5
	Minimum	59	69	64	66	69	67	68	70	64	61	62	63	57	58	54	38	39	42	40	40	59	56	48	43	44	52	62	64	46	39	..	55.4
Marion	Maximum	90	82	85	89	90	92	93	81	83	88	86	84	86	..	..	..	..	..	..	..	70	78	74	80	87	80	86	86	66	64	..	[g]82.6
	Minimum	60	60	65	64	72	61	70	67	60	59	68	66	67	61	51	37	45	50	38	48	50	47	45	48	55	63	66	60	45	35	..	56.1
Mayfield	Maximum	85	81	80	89	90	92	93	82	84	89	87	85	87	81	80	73	83	73	74	82	82	78	76	78	87	88	86	72	62	64	..	81.4
	Minimum	66	67	65	64	67	69	70	69	60	59	59	65	59	59	53	36	36	39	38	38	41	55	45	45	47	51	61	62	51	34	..	54.3
Owensboro §§	Maximum	84	81	83	86	88	90	91	90	82	87	86	84	84	74	65	67	77	67	70	78	78	76	77	78	84	90	87	74	59	62	..	79.3
	Minimum	61	68	66	62	68	70	70	69	63	61	68	65	60	64	52	38	41	51	45	42	60	55	47	44	42	58	68	68	49	40	..	57.2
Paducah (Lone Oak)	Maximum	89	88	91	91	95	96	96	86	84	90	88	86	87	80	74	72	81	81	73	84	80	79	75	89	90	90	89	89	62	70	..	84.2
	Minimum	68	66	69	66	69	71	71	69	63	61	68	67	63	60	51	41	45	50	41	43	59	59	48	54	64	69	61	58	42	40	..	58.5
Russellville	Maximum	86	86	86	92	95	93	96	92	95	93	90	90	70	74	72	81	80	73	82	80	79	76	86	89	90	87	67	72	71	75	..	83.3
	Minimum	68	61	65	66	66	67	66	63	61	60	67	55	65	54	40	40	46	42	35	43	49	46	38	45	46	59	64	42	36	34	..	53.0
Central Division																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	76	82	82	88	91	92	93	78	81	86	88	87	88	75	65	71	81	78	73	81	80	75	81	76	84	91	87	77	60	61	..	80.3
	Minimum	64	67	58	55	68	65	65	65	55	58	65	55	55	65	45	38	39	40	37	38	50	45	40	39	44	56	65	54	40	35	..	52.2
Bardstown §§	Maximum	86	81	88	89	94	95	96	78	87	95	92	91	92	81	71	86	86	70	72	85	84	76	78	80	89	92	88	68	70	88	..	84.4
	Minimum	65	69	61	59	65	68	70	65	63	59	68	64	59	66	56	36	43	47	38	39	46	53	46	38	41	59	62	68	46	38	..	55.2
Bowling Green §§	Maximum	87	95	88	89	93	96	96	81	92	65	90	90	91	74	70	74	83	75	75	82	82	78	75	87	87	91	86	64	60	62	..	81.9
	Minimum	58	69	62	62	62	68	69	68	64	60	60	61	56	59	55	38	38	49	40	40	44	55	49	43	47	51	55	63	46	38	..	54.3
Eubank §§	Maximum	87	79	81	87	88	90	91	86	86	88	86	85	87	81	70	70	80	72	69	79	79	71	73	78	82	87	85	74	65	59	..	79.6
	Minimum	51	63	60	57	62	63	63	64	63	59	60	56	48	57	58	34	35	43	35	33	35	47	43	36	37	44	50	61	45	34	..	49.9
Frankfort	Maximum	81	78	80	85	87	90	91	86	78	86	85	84	84	82	73	65	75	69	67	75	80	73	70	73	79	86	84	82	63	58	..	78.3
	Minimum	64	66	63	65	66	66	66	66	60	58	68	62	55	64	54	38	41	49	37	39	51	48	46	40	43	49	61	61	42	38	..	54.2
Franklin	Maximum	86	80	82	86	88	91	91	82	82	89	86	83	85	75	68	67	76	73	69	77	78	75	69	74	80	85	85	75	59	60	..	78.5
	Minimum	68	68	63	66	68	69	69	68	65	60	66	62	57	65	52	40	43	51	41	41	56	56	49	46	57	58	65	57	44	38	..	56.9
Greensburg §§	Maximum	85	80	82	85	83	91	92	86	82	90	87	84	87	83	70	69	79	71	71	78	80	72	71	76	83	88	85	68	53	60	..	79.0
	Minimum	64	68	59	58	65	65	66	65	62	56	64	59	51	61	56	33	37	43	33	34	47	50	45	40	45	48	57	62	47	35	..	52.5
Irvington	Maximum	84	80	80	86	89	91	92	85	79	86	85	85	85	75	66	67	76	69	68	77	80	74	69	75	82	88	86	81	61	59	..	78.7
	Minimum	70	70	63	60	70	70	71	69	62	59	70	67	59	66	53	37	43	49	42	41	60	55	42	44	50	59	68	57	47	38	..	57.0
Leitchfield	Maximum	82	80	82	85	87	90	92	87	81	88	86	81	85	79	75	68	78	70	70	78	80	73	72	77	83	88	86	80	57	62	..	79.5
	Minimum	68	68	63	60	67	67	67	67	63	59	66	64	58	66	54	35	40	50	40	39	53	50	48	40	48	55	65	56	45	38	..	55.3
Lexington	Maximum	82	77	78	84	86	88	89	76	75	86	85	83	85	74	64	67	77	68	68	76	76	67	68	72	79	85	83	72	53	56	..	76.0
	Minimum	67	65	56	62	69	72	73	66	60	58	67	63	62	64	47	44	51	48	44	56	57	56	50	53	59	59	65	52	43	39	..	57.4
Loretto	Maximum	83	82	83	85	89	91	92	84	83	90	86	86	87	85	70	69	80	75	70	79	81	76	72	77	82	87	85	81	63	62	..	80.3
	Minimum	70	68	60	55	66	65	66	64	61	56	65	60	52	65	55	32	37	45	32	33	54	49	47	38	45	52	65	61	44	35	..	53.5
Louisville	Maximum	80	81	81	86	89	91	92	77	80	88	86	85	86	75	65	68	79	65	70	77	78	74	71	77	81	88	85	78	58	60	..	78.
	Minimum	68	67	62	62	72	72	72	67	62	60	70	66	63	64	51	44	49	49	46	46	59	59	51	48	52	61	70	50	45	40	..	58.2
Do. (Cherokee Park)	Maximum	78	79	79	84	86	89	88	85	78	84	84	82	82	77	69	66	75	75	66	74	77	73	70	74	88	85	84	81	64	58	..	77.
	Minimum	67	66	58	55	68	67	68	68	59	56	67	64	58	64	54	39	42	44	39	40	56	52	46	42	46	53	65	62	46	36	..	54.1
St. John §§	Maximum	85	80	81	87	90	93	94	79	79	90	85	85	87	76	68	70	80	68	70	80	83	74	73	80	85	90	85	65	59	60	..	79.1
	Minimum	62	68	61	61	66	64	65	65	63	60	65	61	54	62	54	34	39	48	32	37	50	47	45	37	46	52	57	62	43	35	..	53.2
Scott	Maximum	77	79	76	86	87	88	89	83	76	81	84	81	86	79	68	67	79	70	67	75	75	73	69	75	81	87	85	79	59	57	..	77.
	Minimum	63	65	53	54	69	67	69	68	58	54	65	54	51	64	55	35	45	47	36	38	57	50	47	43	43	55	65	57	45	35	..	53.0
Shelby City	Maximum	84	79	82	87	90	92	93	82	81	92	88	87	89	78	70	71	85	70	70	81	79	74	74	79	85	89	84	75	61	60	..	80.1
	Minimum	65	67	59	56	67	65	67	65	64	56	65	59	50	65	55	36	38	45	37	34	50	47	48	38	42	50	61	50	52	36	..	53.0
Shelbyville §§	Maximum	82	81	82	90	92	94	94	77	84	91	88	89	90	77	69	71	83	70	73	83	82	76	75	79	85	92	88	66	61	61	..	80.5
	Minimum	56	67	57	57	51	67	67	66	59	55	56	63	56	58	53	35	36	43	35	38	45	48	45	40	43	46	56	61	44	35	..	51.3
Taylorsville	Maximum	83	78	78	86	87	90	90	80	77	84	83	82	84	77	68	67	76	67	66	75	81	77	69	74	78	85	84	77	62	57	..	77.4
	Minimum	65	68	68	54	65	64	64	65	62	56	65	60	52	63	55	35	40	48	34	34	50	44	43	38	42	47	65	62	46	36	..	53.0
Williamstown §§	Maximum	75	81	80	87	90	91	91	75	81	86	86	86	89	73	69	72	83	70	73	80	79	72	74	77	85	90	86	67	58	67	..	79.1
	Minimum	61	65	50	55	58	68	67	66	56	52	64	60	55	58	53	37	40	45	39	42	42	54	44	42	47	49	56	61	45	35	..	52.2
Eastern Division																																	
Beattyville §§	Maximum	90	85	82	90	90	93	95	86	82	90	85	84	89	79	72	71	83	72	73	82	82	70	77	80	84	93	89	82	56	62	..	81.0
	Minimum	58	64	57	56	60	66	68	66	63	56	62	56	51	52	62	40	40	45	32	38	40	46	50	41	41	43	47	51	48	35	..	51.1
Berea	Maximum	85	78	79	87	89	90	91	83	78	79	86	86	86	76	71	62	85	70	70	81	79	71	79	84	83	87	84	75	65	69	..	79.0
	Minimum	65	56	59	67	68	68	71	68	65	68	63	60	56	56	55	34	38	40	32	34	50	51	38	40	45	59	58	60	46	35	..	53.
Farmers	Maximum	68	81	80	87	87	90	91	85	78	84	85	83	84	78	72	65	75	73	68	74	80	73	70	73	69	85	84	75	65	60	..	77.4
	Minimum	52	67	54	52	64	65	69	64	59	56	65	55	48	65	58	37	38	44	34	35	44	48	48	39	39	44	51	63	48	34	..	51.3
Maysville §§	Maximum	83	84	82	92	93	95	94	79	81	86	88	87	90	77	73	71	82	71	72	80	83	73	73	78	83	90	88	73	59	63	..	80.
	Minimum	55	65	50	52	54	55	55	56	56	51	61	55	50	51	56	35	36	46	35	36	38	45	44	39	43	43	47	62	41	32	..	48.1
Middlesboro	Maximum	86	79	84	85	86	89	90	88	83	82	80	80	86	85	72	61	77	77	68	75	75	71	73	74	77	81	81	81	65	61	..	78.
	Minimum	57	67	62	61	63	66	66	64	65	61	64	50	52	60	60	38	42	52	38	41	45	51	52	46	46	48	48	46	49	39	..	53.3
Mount Sterling §§	Maximum	87	78	77	88	89	91	91	82	76	85	85	82	84	74	68	64	77	65	66	76	80	68	70	75	79	85	85	71	54	57	..	77.0
	Minimum	52	66	55	55	63	69	70	67	59	57	64	58	51	65	56	36	40	47	34	35	44	53	47	43	44	48	55	61	47	36	..	52.0
Richmond §§	Maximum	85	85	83	88	89	91	92	81	83	90	88	87	88	77	70	68	81	72	72	80	79	69	73	76	83	89	85	72	64	64	..	80.1
	Minimum	65	66	57	59	65	68	69	69	64	57	65	60	57	67	57	39	43	48	38	40	52	57	50	45	46	50	64	62	46	38	..	55.
Weeksbury	Maximum	91	78	84	87	90	90	94	92	81	82	84	86	88	86	82	68	74	82	78	79	80	79	77	85	87	78	84	77	70	72	..	82.3
	Minimum	58	67	72	68	58	63	65	65	66	62	58	59	58	58	57	42	43	41	40	56	48	52	51	54	47	42	45	40	42	43	..	54.0
Williamsburg §§	Maximum	87	85	84	88	87	91	92	89	85	84	83	82	86	85	75	75	80	75	69	79	80	73	72	75	79	84	86	84	55	66	..	80.
	Minimum	60	66	67	66	63	65	65	64	67	63	60	55	53	56	64	40	40	48	36	37	42	51	53	46	45	46	48	50	46	40	..	53.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

* [1], [2] etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shading
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

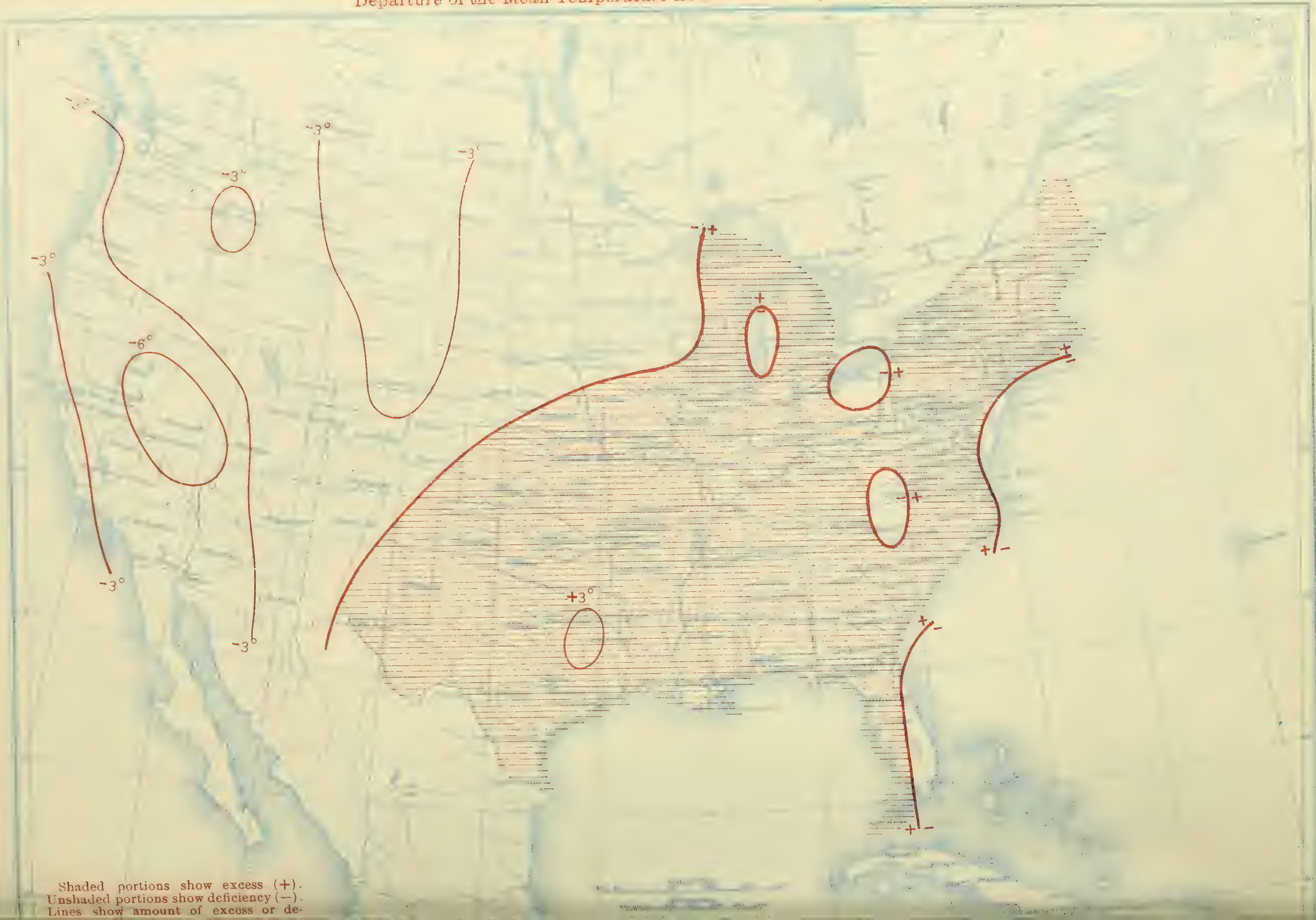
KENTUCKY SECTION

OCTOBER, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 27, 1916

Departure of the Mean Temperature from the Normal, October, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

. XXI. Louisville, Ky., October, 1916. No. 10.

GENERAL SUMMARY.

xceptionally fine weather prevailed during most of the th, and conditions were especially favorable for farm work. dry, warm weather of the first decade enabled farmers to plete the housing of late tobacco under particularly favora- conditions, and also hastened the curing of tobacco already arns. The temperature averaged near normal, but there several warm and several cold periods of short duration. ezing temperatures occurred at a few stations on the 1st, and everal stations on the 11th, with killing frosts in a number laces on the latter date. However, the first killing frost ne season that was general over the State occurred on the , when minimum temperatures ranged between 24° and 34°. se frosts occurred so late that they occasioned no damage onsequence.

ainfall, although averaging somewhat above normal, was cient over large areas, and fall plowing was interfered with ome extent by dry ground. This condition was relieved by rains of the 18-20th.

PRESSURE.

igh pressure formations dominated weather conditions over section during nearly the entire month, distinctive areas ining during the periods, 1st-8th; 10-12th; 14th; 17th; -24th, and 28th-31st. The only low pressure formation cting this section in any marked degree appeared on middle Gulf coast the morning of the 17th. By the ning of the 18th it had increased and formed a storm of t strength with center near Pensacola, Fla. This storm ed due northward into the Ohio Valley by the morning of 19th, with decreasing energy but increasing magnitude. lve hours later the center of low pressure had moved appar- y to the lower Lake section; but during the night the for- ion seemingly developed to the northwest and on the morn- of the 20th reappeared as a great storm centered about Lake higan and enveloping the upper Mississippi Valley, Lake on, Ohio Valley and Tennessee. The storm moved north- ward during the 20th and at 8 p. m. 20th, was centered r Lake Huron. Other low pressure formations, all of minor ortance, appeared in the periods 9-13th, 16th, and 24-25th. he mean sea-level pressure, based on the reports from two ions, was 30.13 inches. The highest was 30.48 inches on 10th, and the lowest 29.48 inches on the 20th, both at isville.

TEMPERATURE.

he mean temperature for the State, based on the reports n 41 stations, was 57.6°, which is 0.1° below normal. Dur- the period 4-9th maximum temperatures in the 90's occurred nany stations, the highest for the State being 97° at Earling- on the 7th. The period 27th-31st was also warm. From 10th to 26th minimum temperatures were generally low, lowest for the State being 24° at several stations in the tral counties on the 22d.

PRECIPITATION.

he average precipitation for the State, computed from the rds of 51 stations, was 2.59 inches, which is 0.31 inch ve normal. Most of the rain occurred in the period 15-20th, practically the only heavy rains were those of the 18th and 19th. Monthly amounts were 2 inches or less over considerable areas in north-central, southeastern, and western parts of the State; but over most of the State they ranged between 2 and 4 inches, being largest in the south-central counties. At the various stations monthly amounts ranged between 1.29 inches at Princeton, and 4.99 inches at Eubank.

WIND.

The total wind movement at Louisville was 7,390 miles, and at Lexington 9,449 miles, with average hourly velocities of 9.9 and 12.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 50 miles per hour and at Lexington 46 miles per hour, from the southwest on the 20th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 2 p. m. 44 per cent, and at 7 p. m. 53 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 72 and at Lexington 70.

MISCELLANEOUS.

October 5.—A barn was burned by lightning near Hickman, Ky.

October 15.—About twenty negro pupils were injured when lightning struck a school building at Barboursville, Ky.

October 18.—A slight earthquake shock was felt in Louisville about 4:05 p. m. and also at a few other places in the State, but no damage was reported.

RIVERS.

Stages were low in all rivers of the State, including the Ohio, navigation in the Ohio being possible only where the river was controlled by locks and dams.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	52.0	−5.7	89	23	2.42	+0.14	.
1890	55.7	−2.0	87	23	2.94	+0.66	.
1891	54.8	−2.9	92	21	0.78	−1.50	.
1892	57.3	−0.4	97	19	0.51	−1.77	
1893	56.4	−1.3	90	19	4.00	+1.72	.
1894	58.6	+0.9	92	25	1.36	−0.92	5
1895	52.2	−5.5	89	14	1.24	−1.04	4
1896	55.8	−1.9	90	25	1.71	−0.57	5
1897	63.2	+5.5	96	26	1.10	−1.18	4
1898	57.1	−0.6	93	21	4.19	+1.91	10
1899	61.3	+3.6	93	26	2.42	+0.14	5
1900	64.5	+6.8	94	29	2.29	+0.01	5
1901	58.1	+0.4	93	25	1.57	−0.71	4
1902	60.1	+2.4	91	25	2.34	+0.06	5
1903	57.7	0.0	96	19	2.22	−0.06	5
1904	57.2	−0.5	93	20	0.52	−1.76	2
1905	57.0	−0.7	90	25	4.95	+2.67	9
1906	56.9	−0.8	91	20	1.51	−0.77	7
1907	55.5	−2.2	93	20	2.97	+0.69	6
1908	57.1	−0.6	92	20	0.71	−1.57	3
1909	55.2	−2.5	94	18	2.11	−0.17	6
1910	61.4	+3.7	96	17	4.45	+2.17	6
1911	59.9	+2.2	94	27	3.71	+1.43	10
1912	59.5	+1.8	92	25	1.42	−0.86	4
1913	56.9	−0.8	97	23	3.55	+1.27	9
1914	59.7	+2.0	91	22	5.10	+2.82	9
1915	60.6	+2.9	90	27	3.40	+1.12	6
1916	57.6	−0.1	97	24	2.59	+0.31	6

Climatological data for October, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	57.8	+ 0.3	93	7	29	22	47	2.46	+0.31	1.90	0	3	20	5	6	n.	W. T. Austin.
Blandville	Ballard	445	34	59.8	+ 1.7	87	7	32	21	32	2.04	−0.69	1.17	T.	3	18	7	6	sw.	E. W. Horr.
Calhoun	McLean	437	12	59.4	− 0.2	92	7	29	26	43	2.97	−0.25	0.93	T.	7	19	8	4	se.	W. A. Taylor.
Earlington	Hopkins	420	25	60.6	+ 1.6	97	7	29	22	50	2.22	−0.02	1.62	0	4	25	0	6	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	59.3	......	92	7	28	22	43	2.55	......	0.90	0	4	....	....	....	......	C. R. Lovell.
Hopkinsville	Christian	524	19	60.4	0 0	90	7	30	22	41	2.31	−0.56	1.78	0	5	25	1	5	e.	W. F. Randle.
Marion	Crittenden	571	17	60.8	+ 1.7	91	7	30	21	40	2.29	−0.25	1.35	T.	4	17	9	5	sw.	B. C. Paris.
Mayfield	Graves	364	7	58.6	......	90	7†	30	22	47	2.35	......	1.05	0	3	....	....	....	......	J. N. Davis.
Owensboro	Daviess	479	18	58.8	− 0.2	90	7	32	22	36	3.49	+0.39	1.60	T.	5	19	6	6	se.	Henry S. Berry.
Paducah	McCracken	341	17	60.8	− 0.6	94	6	31	22	37	2.34	−0.08	1.30	0	3	26	0	5	......	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{f}61.0	+ 2.9	89^{c}	7	35^{h}	22	32^{h}	1.29	−1.05	1.06	0	3	....	....	....	......	Dr. J. A. H. Miller.
Russellville	Logan	590	5	57.8	......	97	7	28	21†	48	2.25	......	2.16	0	2	25	2	4	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	22	57.8	− 1.7	84	7	30	22	40	2.60	+0.17	1.05	0	5	20	3	8	s.	W. W. Hicks.
Anchorage	Jefferson	700	14	55.5	− 1.0	92	7	24	22	45	1.52	−1.34	0.60	0	5	22	2	7	sw.	C. E. Barret.
Bardstown	Nelson	637	18	57.6	− 1.9	94	6	27	21	52	2.80	+0.40	1.40	0	4	20	3	8	se.	Chas. M. Talbott.
Bowling Green	Warren	500	26	59.9	+ 1.0	93	8	30	22†	46	2.17	−0.20	1.80	0	4	18	9	4	s.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	....	......	......	....	....	....	......	3.36	+1.06	1.05	0	5	....	....	....	......	C. L. Hurt.
Cloverport	Breckenridge	375	2	....	......	......	....	....	....	......	2.64	......	1.15	0	7	....	....	....	......	W. A. Cockerill.
Eubank	Pulaski	1177	21	55.2	− 1 5	93	7	24	22	53	4.99	+2 85	1.67	0	5	17	2	12	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	55.4	− 1.1	86	7	28	22	42	2.15	+0.20	1.36	0	5	18	5	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	55.8	− 0.5	85	5†	31	22	33	2.42	+0.32	1.36	0	6	12	15	4	se.	J. E. Newman.
Greensburg	Green	581	23	55.0	− 1.5	87^{a}	6	25^{a}	22	44^{a}	3.44	+1.12	1.62	0	6	15	4	12	w.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	....	......	......	....	....	....	......	2.21	−0.26	1.24	0	6	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	57.6	+ 2.0	88	8	29	22	36	3.23	+0.55	1.17	T.	6	22	2	7	sw.	W. J. Piggott.
Junction City	Boyle	1087	21	57.3	− 0.2	92	7	24	22	44	3.48	+1.49	1.34	0	7	20	4	7	w.	H. F. Ewing.
Leitchfield	Grayson	635	20	56.7	− 1.4	88	7	27	22	38	2.22	−0.21	0.92	T.	6	19	6	6	ne.	John E. Stone.
Lexington	Fayette	989	31	57.6	+ 1.1	88	7	33	22	32	2.04	−0.18	1.35	T.	6	21	3	7	se.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	^{c}54.7	− 3.6	88^{c}	7	24^{c}	22	46	2.84	+0.40	0.80	......	10	16^{a}	4^{a}	10^{a}	......	Loretto Academy.
Louisville	Jefferson	525	43	58.3	− 0.1	89	7	31	22	32	2.02	−0.61	1.26	0	5	19	5	7	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	6	55.5	......	85	8	27	22	37	2.06	......	1.30	0	5	17	7	7	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	56.0	− 1.6	90	7	26	22	43	1.99	−0.50	1.16	T.	6	24	3	4	......	Sisters of Loretto.
Scott	Kenton	900	18	56.3	− 1.5	88	8	26	22	40	2.09	−0.25	0.95	0	6	20	3	8	se.	E. B. Wilson.
Shelbyville	Shelby	825	26	57.0	+ 0.6	94	7	26	22	46	1.78	−0.35	1.08	0	5	20	3	8	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	54.0	- 2.0	86	7	24	22	44	1.75	−0.80	0.88	T.	5	20	3	8	se.	E. D. Bourne.
Williamstown	Grant	943	13	58.4	+ 1.4	93	7	29	22	42	1.47	−1.41	1.13	T.	6	17	6	8	......	Miss Rose Carter.
......	......	....	....	....	......	......	....	....	....	......	......	......	......	......	....	....	....	....	......	......
......	......	....	....	....	......	......	....	....	....	......	......	......	......	......	....	....	....	....	......	......
......	......	....	....	....	......	......	....	....	....	......	......	......	......	......	....	....	....	....	......	......
Eastern Division.																				
Beattyville	Lee	650	11	57.0	+ 0.5	93	7	30	23†	49	3.64	−0.48	1.55	0	5	19	4	8	sw.	A. H. Bowman.
Berea	Madison	1070	14	57.6	− 0.9	91	7	25	22	45	1.75	−1.32	0.75	0	6	24	1	6	nw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	....	......	......	....	....	....	......	2.52	+0.05	1.56	0	7	....	....	....	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	....	......	......	....	....	....	......	1.67	−0.50	1.03	0	5	19	5	7	......	J. V. Oldham.
Farmers	Rowan	668	9	55.4	− 1.2	87	6	26	27	45	2.27	−1.03	1.50	0	3	23	7	1	w.	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	....	......	......	....	....	....	......	......	......	......	......	....	....	....	....	......	......
Jackson	Breathitt	776	4	....	......	......	....	....	....	......	2.80	......	1.25	0	6	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	1	....	......	......	....	....	....	......	4.33	......	1.39	0	9	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	11	....	......	......	....	....	....	......	2.55	+0.13	1.88	0	5	....	....	....	......	G. M. Guerin.
Manchester	Clay	1400	4	....	......	......	....	....	....	......	4.12	......	1.17	0	8	....	....	....	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	55.2	− 1.9	91	7	28	22†	50	2.45	+0.18	1.50	0	7	20	4	7	se.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	57.0	− 0.2	86	7	28	27	43	3.95	+1.65	1.25	0	10	19	11	1	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	55.2	+ 0.4	87	7	25	22	43	2.37	−0.03	1.08	0	7	17	6	8	se.	W. R. McKee.
Pikeville	Pike	634	9	....	......	......	....	....	....	......	3.43	+0.99	0.94	0	6	....	....	....	......	I. M. Williams.
Richmond	Madison	926	23	59.2	+ 1.3	92	7	28	22	38	3.40	+1.15	1.55	0	7	19	3	9	e.	J. W. Crooke.
Weeksbury	Floyd	1216	2	59.2	......	91	8	31	22†	50	3.40	......	1.00	0	8	22	2	7	......	O. A. Lund.
Williamsburg	Whitley	939	19	56.2	− 3.7	88	6	29	23†	42	1.73	−0.82	0.67	0	6	19	7	5	s.	N. C. Jones.
State averages and extremes				57.6	......	97	7	24	22	53	2.59	......	2.16	T.	6	20	5	6	se.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are use in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky.

Daily Precipitation for October, 1916.

Stations.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																
aver Dam‖ ..... G.															.16			1.90	.40													2.46
aneyville ..... M								T										1.17		[illegible]											[illegible]	[illegible]
lhoun ..... G.								T					T		.25	.19	.04	.93	.77	.72					[illegible]						T.	[illegible]
rlington ..... G.																.10			1.62	.47											[illegible]	[illegible]
eenville																.50		.90	.80	.35												2.55
pkinsville ..... C.																.05	.06	.95	.83	.42					T.							2.31
arion ..... O.													T		.23	T.		1.00	.35	.71												2.29
ayfield‖																			1.05	1.00											.30	2.35
vensboro‖ ..... O.										T.			T.		.10	.90	.29		1.60	.60	T											3.49
ducah ..... O.																		1.30	.52											.52		2.34
inceton																.20			1.06	.03												1.29
ssellville‖															.09			2.16														2.25
Central Division.																																
pha ..... C.									.20				T.		T.	.76		1.05	.56	.03					T							2.60
chorage ..... O.									T.				T.		.25	.20		.38	.60	.09					T.							1.52
rdstown‖ ..... S.									.20			T.		T	.70			1.40	.50													2.80
wling Green‖ ..... G.													T.		T	.08		.02	1.80	.27												2.17
rnside‖ ..... C.										.22			T.	T	T.	.75	1.05		1.04	.30	T.					T.				T.		3.36
overport‖ ..... O.													T.	.02	.06	.75	.05		1.15	.56						.05				T.		2.64
bank ..... C.										.41						.72	1.42		1.67	.77												4.99
ankfort‖ ..... K.															T.	.40	.08		1.36	.29	T.					.02						2.15
anklin ..... G									.02				T.		T.	.09	.12	1.36	.63	.20					T.						T	2.42
eensburg‖ ..... G.										.23			T.			.33	.65		1.62	.59	T.					.02						3.44
gh Bridge‖ ..... K															.01	.43	.10		1.24	.40	.03											2.21
ington ..... O.													T.		.57	.07		.40	1.17	.97					.05							3.23
nction City ..... K.									.68				.03		.10	.55		.48	1.34	.30												3.48
itchfield ..... G.													T.		T	.40	.07	.92	.25	.52	T.				.06							2.22
xington *** ..... K									.02				T.		.18	.02		1.09	.28	.45					T.							2.04
retto ..... S.									.18		.01		T.		.15	.49	.01	.56	.80	.61		.01		.02	T.							2.84
uisville*** ..... O.									T.				T.		.28	.09		1.09	.18	.38					T.							2.02
Do (Cherokee Park) ..... O.													T.		.30	.15			1.30	.29					.02							2.06
John ..... S.										T.			T.		.04	.35	.12		1.16	.30	.02											1.99
ott ..... L.									.64				T.		.15	.02		.05	.95	.28					T.							2.09
elbyville ..... S.															T.	.32	.10		1.08	.25	.03											1.78
ylorsville ..... S.									T.						.17	.02		.27	.88	.41					T.							1.75
illiamstown‖ L										.06						.10	T.		1.13	.15	.01					.02				T.		1.47
Eastern Division.																																
attyville ‡ ..... K.										.56						.86	.37		1.55	.30	T.					T.				T.		3.64
rea ..... K.									.12				T.		.09	.46		.31	.75						T.	.02						1.75
tlettsburg‖ ..... B.										.64						.26	.30		1.56	.12	.20						.04					2.52
lmouth‖ ..... L.									.07							.10	.04		1.03	.43												1.67
rmers ..... L.									T.				T.	T.	T.	.25			1.50	.52												2.27
zard‖ ..... K.																																
ckson‖ ..... K.										.28			T.	T.		.20	.80		1.25	.07	T.					T.				.20		2.80
ndon‖ ..... C.										.50				.05		.50	1.00	.09	1.39	.30						.10				.40		4.33
uisa‖ ..... B.																.16	.08		1.88	.22	.21											2.55
anchester‖ ..... K.										.81						.14	.78			1.17	.97					.06				.07	.12	4.12
aysville‖ ..... O									.09					.02		.15			1.50	.46	.21					.02						2.45
ddlesboro ..... C.									.45				.31		.18	.65		.42	1.25	.26									.11	.29	.03	3.95
ount Sterling‖ ..... L.										.10			T.			.26	.03		1.08	.84	.04					.02						2.37
keville‖ ..... B.										.96						.15	.94		.74		.32										.52	3.43
chmond‖ ..... K.										.32			T.	.04	T.	.40	.16		1.55	.92						.01						3.40
eeksbury ..... B.													.10	.10	.75	1.00			.70	.15									.25	.35		3.40
illiamsburg‖ ..... C.										.25				T.		.09	.22		.67	.22					T.					.28		1.73

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

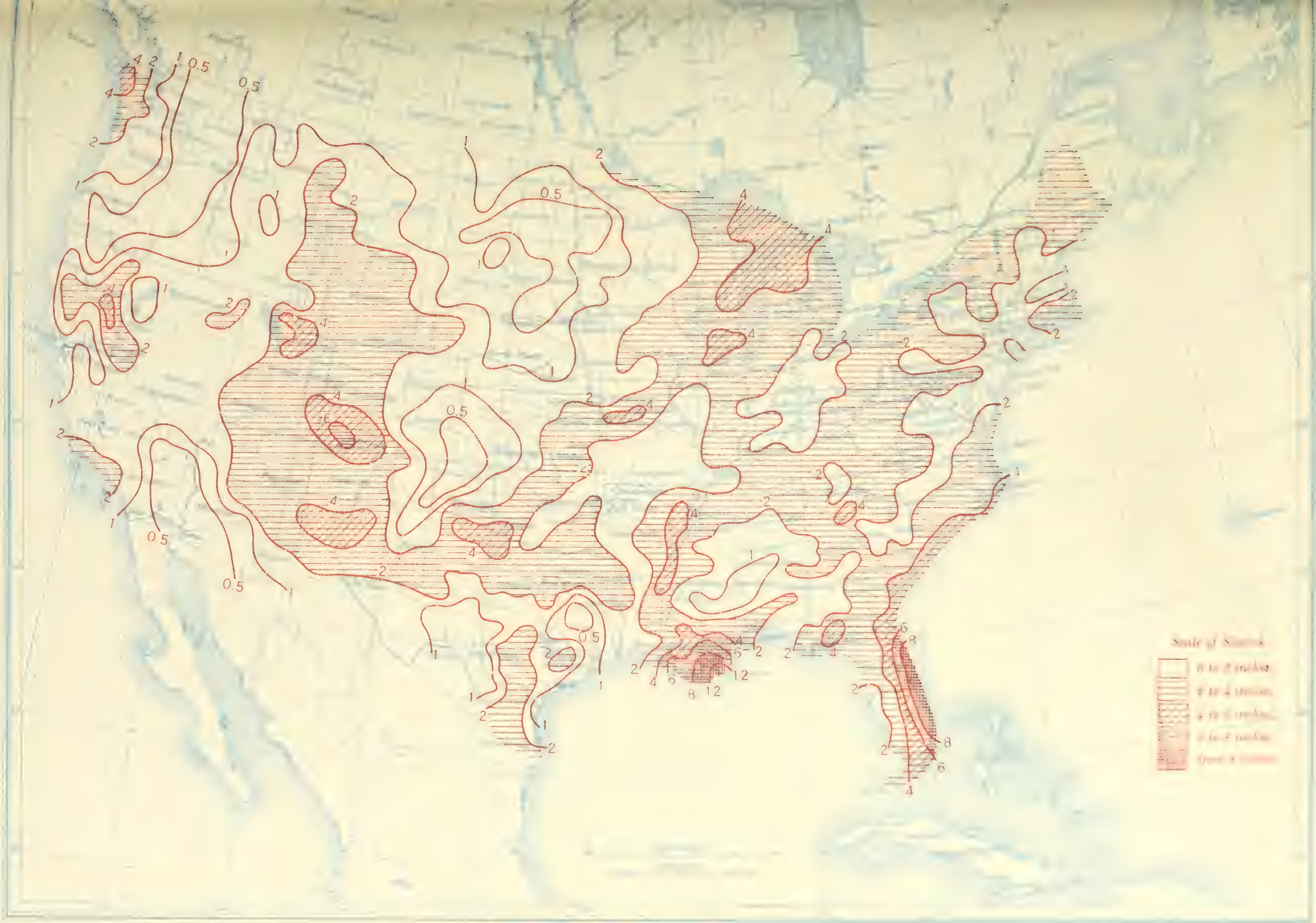
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tenn- see; (O) Ohio; (M) Mississippi

Daily temperatures for October, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	74	78	82	86	89	90	93	90	88	64	72	79	79	78	75	76	68	68	66	50	51	63	71	72	59	62	73	78	76	75	68	74.0
	Minimum	34	42	38	40	57	55	53	50	66	44	31	32	41	37	35	38	56	47	57	39	36	29	30	37	39	29	34	36	38	46	48	41.7
Blandville	Maximum	70	72	76	81	83	85	87	82	83	61	66	78	75	69	80	78	69	59	62	61	49	61	67	72	60	60	71	76	75	76	67	71.3
	Minimum	41	49	47	49	57	60	61	68	54	43	38	48	58	43	56	59	55	47	54	35	32	34	39	46	44	34	43	48	50	53	52	48.3
Calhoun	Maximum	74	78	82	86	89	91	92	90	88	64	72	78	77	70	69	76	72	68	64	63	50	62	72	75	62	63	76	78	78	77	70	74.4
	Minimum	36	42	40	43	52	57	53	60	60	42	34	39	58	38	46	55	50	44	53	35	34	30	33	38	47	29	39	40	45	49	52	44.3
Earlington §§	Maximum	79	83	86	91	93	93	97	94	89	67	75	82	78	75	74	80	71	57	65	45	53	68	77	80	60	66	80	85	80	82	69	76.6
	Minimum	34	42	40	41	50	51	53	58	68	45	31	40	60	38	48	56	55	47	49	28	35	29	32	39	49	30	33	39	50	48	52	44.5
Greenville	Maximum	74	78	81	84	88	88	92	90	88	62	70	78	78	72	75	76	73	59	63	62	52	63	71	76	62	62	74	78	72	78	69	74.0
	Minimum	33	40	38	41	50	57	53	60	62	44	32	38	58	39	49	56	55	47	55	37	34	28	32	38	49	30	36	38	52	50	51	44.6
Hopkinsville §§	Maximum	72	75	79	85	84	88	90	86	88	77	71	77	78	75	82	78	72	67	62	63	52	62	71	75	65	63	75	79	77	74	69	74.5
	Minimum	39	45	42	44	55	59	56	63	61	46	35	43	61	42	57	58	59	49	55	31	31	30	33	40	50	31	37	40	42	50	52	46.3
Marion	Maximum	72	76	81	85	88	90	91	79	77	70	72	64	68	76	78	86	88	56	64	59	51	71	76	63	61	64	76	78	78	78	67	73.6
	Minimum	36	49	48	45	72	61	59	57	56	55	50	45	49	40	50	50	50	45	55	36	30	39	45	35	47	34	43	50	51	52	53	48.0
Mayfield	Maximum	73	75	80	83	87	88	90	85	90	64	68	79	80	74	83	80	70	59	62	50	53	64	71	75	59	64	76	79	78	80	69	73.8
	Minimum	34	37	44	40	41	41	56	56	65	44	33	35	47	42	55	57	60	49	48	26	31	30	24	35	35	30	42	41	43	48	54	43.3
Owensboro §§	Maximum	69	74	79	81	84	87	90	89	83	62	67	77	75	70	66	70	65	56	64	42	46	60	69	73	64	64	71	76	76	77	66	70.7
	Minimum	41	45	43	51	58	57	55	62	65	44	39	42	60	43	51	55	52	47	49	37	36	32	36	42	49	23	39	42	48	52	52	47.0
Paducah (Lone Oak)	Maximum	73	75	78	84	86	94	90	89	85	63	67	80	79	72	82	80	68	63	67	61	51	62	70	74	66	64	70	72	80	79	70	74.0
	Minimum	40	48	45	48	55	60	62	67	56	46	36	46	63	44	56	56	53	47	55	36	32	31	37	57	51	35	41	46	45	51	55	47.7
Princeton	Maximum	..	..	..	83	84	86	89	85	87	62	67	77	76	69	76	78	70	68	65	62	55	45	65	74	68	61	72	75	77	76	69	[c]72.2
	Minimum	..	..	..	..	..	..	..	62	58	50	45	66	60	56	57	60	..	55	55	36	40	35	37	44	57	36	40	53	48	53	41	[b]49.7
Russellville	Maximum	79	79	84	82	89	91	97	87	64	79	77	79	72	82	79	78	68	63	46	52	72	73	78	59	60	74	78	79	75	67	72	74.6
	Minimum	38	39	39	39	52	53	54	64	42	31	32	41	39	37	55	57	48	46	34	34	28	29	36	36	28	32	35	45	48	48	31	41.0
Central Division																																	
Alpha	Maximum	64	70	70	73	79	80	84	79	79	72	65	70	69	66	66	70	70	61	65	63	44	56	67	72	67	60	66	72	62	67	67	68.2
	Minimum	36	39	39	40	52	60	56	71	72	51	35	30	60	44	65	63	61	52	63	40	36	30	35	46	56	33	32	38	45	55	33	47.4
Anchorage	Maximum	72	80	82	84	87	88	92	89	85	65	69	68	72	68	57	72	68	55	65	60	40	60	70	74	58	57	70	74	75	76	68	71.0
	Minimum	34	40	37	42	56	56	56	54	55	38	31	35	34	33	43	52	41	40	53	35	29	24	30	34	36	28	34	34	40	47	40	40.0
Bardstown §§	Maximum	82	78	85	92	93	94	92	89	66	71	79	73	71	60	72	68	58	60	45	43	60	74	77	60	62	75	72	79	80	70	70	72.6
	Minimum	35	40	38	40	42	53	67	66	44	33	37	45	41	44	52	52	44	48	40	36	27	30	37	42	30	33	37	41	51	59	32	42.5
Bowling Green§§	Maximum	79	80	84	86	86	89	89	93	89	68	78	79	80	79	69	69	70	68	60	53	54	63	79	80	58	60	78	80	78	75	69	74.9
	Minimum	38	40	40	42	43	50	57	58	58	46	36	59	59	47	43	57	60	51	49	41	33	30	33	43	46	30	34	35	35	48	50	44.9
Eubank§§	Maximum	71	77	80	80	89	88	93	84	83	70	74	79	75	72	68	69	63	58	66	59	48	58	68	73	65	58	71	73	70	74	70	71.8
	Minimum	32	31	35	35	36	48	53	52	56	47	30	30	35	41	38	39	61	47	51	48	36	24	26	30	33	26	28	30	35	38	43	38.5
Frankfort	Maximum	69	75	75	80	82	85	86	84	83	62	63	73	75	69	60	71	70	57	64	63	43	55	64	69	63	55	67	69	73	73	63	69.0
	Minimum	35	39	37	38	50	55	50	53	60	43	32	34	56	40	41	53	57	42	51	38	35	28	31	34	40	31	31	23	36	44	46	41.7
Franklin	Maximum	68	72	74	79	85	84	85	85	85	63	65	79	79	69	77	77	73	60	64	62	49	57	65	70	58	56	69	71	73	70	68	70.7
	Minimum	38	43	44	46	55	59	59	64	60	46	36	46	65	42	52	62	55	49	54	37	36	31	34	40	41	24	38	42	48	52	48	47.0
Greensburg§§	Maximum	69	75	76	81	86	87	..	83	85	60	67	75	77	69	69	75	65	59	65	49	45	51	67	72	62	58	71	72	76	74	70	[a]69.7
	Minimum	32	36	35	37	45	54	57	..	55	46	30	34	43	39	43	53	58	45	48	41	39	25	28	33	42	29	28	33	35	42	45	[a]40.3
Irvington	Maximum	68	74	74	81	84	85	86	88	85	59	64	76	75	65	60	74	69	56	64	60	43	57	66	70	62	56	67	71	73	73	67	69.4
	Minimum	38	45	46	47	55	58	57	60	58	44	36	40	60	42	47	53	48	46	54	37	38	29	37	40	44	32	39	39	39	53	55	45.7
Junction City	Maximum	74	78	78	80	89	89	92	87	85	60	68	78	76	67	65	70	68	61	62	61	42	58	70	74	63	60	73	74	76	76	70	71.7
	Minimum	34	36	37	38	51	55	52	65	59	44	33	34	52	39	40	57	50	55	51	57	35	24	28	33	42	30	29	32	38	51	48	42.9
Leitchfield	Maximum	70	74	76	81	84	85	88	85	85	60	65	75	75	68	68	73	63	57	65	63	47	57	67	71	58	56	69	73	76	72	67	70.1
	Minimum	36	41	41	43	54	54	55	58	58	45	35	38	56	40	41	54	42	45	53	36	36	27	31	37	47	28	33	37	42	50	48	43.3
Lexington	Maximum	69	75	74	79	84	84	88	84	81	57	63	73	73	61	63	69	66	57	62	63	38	55	66	71	61	54	66	70	72	72	65	68.2
	Minimum	40	50	50	51	60	66	63	66	49	41	39	47	48	41	50	55	43	41	49	36	34	33	39	49	41	36	41	48	51	54	47	47.0
Loretto	Maximum	71	77	78	82	..	87	88	85	..	86	66	..	76	68	63	72	70	61	64	64	43	57	67	70	61	56	70	72	75	74	69	70.4
	Minimum	32	35	35	36	..	50	50	58	..	44	29	..	32	35	39	52	51	43	52	36	36	24	26	31	41	28	31	31	39	48	47	39.0
Louisville	Maximum	70	76	80	83	84	88	89	87	82	60	66	75	74	66	58	71	66	56	62	62	40	57	65	71	58	58	69	72	75	73	66	69.6
	Minimum	40	48	48	51	59	61	61	62	52	43	40	45	50	44	50	55	47	44	52	35	34	31	40	44	42	38	42	43	50	55	51	47.0
Do. (Cherokee Park)	Maximum	68	73	76	79	80	83	83	85	82	58	64	74	74	66	64	71	69	56	62	62	41	55	64	69	61	54	67	70	73	72	67	68.5
	Minimum	36	41	41	42	51	55	52	53	56	41	34	37	60	38	38	53	46	41	51	36	34	27	31	36	47	32	36	35	42	50	47	42.5
St. John §§	Maximum	70	77	79	81	87	87	90	89	89	60	65	77	80	63	63	74	63	56	64	42	47	57	67	71	59	59	73	78	76	72	71	70.5
	Minimum	37	39	39	42	50	56	52	51	64	43	32	36	45	38	42	53	50	44	46	39	35	26	31	35	41	27	32	35	38	39	46	41.4
Scott	Maximum	68	75	76	81	86	87	86	88	81	56	62	75	72	64	57	70	68	57	68	62	40	57	68	71	61	57	69	70	74	75	66	69.3
	Minimum	37	39	41	41	56	58	56	56	54	49	32	35	61	37	40	52	45	39	51	33	34	26	23	36	47	34	38	35	44	51	52	43.3
Shelbyville §§	Maximum	73	82	81	84	90	92	94	92	87	64	70	81	79	67	57	71	65	56	64	44	43	63	72	75	60	62	72	75	77	80	69	72.3
	Minimum	37	38	41	41	49	54	51	56	63	40	30	35	46	36	40	49	48	40	44	42	35	26	30	35	47	30	35	35	40	49	47	41.6
Taylorsville	Maximum	67	74	75	79	82	85	86	84	84	59	63	73	75	67	65	71	67	56	64	63	42	54	65	68	60	55	68	69	74	72	68	68.8
	Minimum	33	35	34	35	48	52	48	52	60	42	29	32	52	31	39	50	50	42	51	37	36	24	27	32	38	26	28	30	34	43	42	39.2
Williamstown §§	Maximum	77	81	81	85	91	92	93	88	83	65	71	79	74	68	55	70	66	56	62	45	39	61	72	75	60	62	71	73	78	78	68	71.5
	Minimum	35	43	47	46	54	58	57	59	68	39	37	42	53	38	47	49	45	38	45	42	34	29	37	47	47	33	38	42	48	52	54	45.3
Eastern Division																																	
Beattyville §§	Maximum	72	77	76	80	90	89	93	92	85	63	72	80	78	61	61	70	69	58	77	59	45	61	75	75	74	63	75	75	79	80	74	73.5
	Minimum	34	38	36	37	41	52	56	54	52	50	32	35	35	38	46	47	60	41	48	53	40	31	30	31	33	34	30	30	33	35	45	40.4
Berea	Maximum	73	76	74	80	85	86	91	86	82	68	64	76	65	77	65	72	68	68	68	62	48	58	69	75	66	60	75	76	74	75	72	72.1
	Minimum	38	54	36	38	47	60	54	67	62	45	28	34	54	36	39	59	52	52	52	46	38	25	29	33	45	30	30	33	46	49	42	43.6
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville§§	Maximum	73	80	82	85	90	90	91	90	83	62	69	78	76	66	59	71	63	58	64	61	43	57	68	76	68	59	70	73	78	77	71	72.0
	Minimum	35	38	38	39	40	49	50	51	52	39	32	33	39	35	35	45	47	33	39	52	36	28	30	32	25	31	28	29	32	43	44	38.4
Middlesboro	Maximum	69	73	74	79	85	85	86	83	81	67	68	72	69	71	67	78	75	62	66	66	50	61	69	73	71	63	71	73	74	73	70	71.7
	Minimum	37	33	38	41	54	53	55	53	57	50	37	39	42	38	39	59	58	49	52	46	35	30	29	33	22	22	28	31	31	55	48	42.4
Mount Sterling§§	Maximum	69	73	74	78	86	86	87	85	84	58	65	76	74	67	61	71	60	59	65	52	37	55	68	70	68	56	68	69	75	74	69	69.0
	Minimum	36	38	36	42	51	60	50	53	66	42	31	33	38	39	38	52	52	41	41	56	37	25	30	32	41	33	28	42	34	39	46	41.5
Richmond §§	Maximum	74	72	79	85	88	90	92	86	82	66	70	78	75	67	62	72	69	62	64	47	45	58	70	75	67	59	72	76	77	76	70	71.8
	Minimum	37	44	43	49	55	61	58	61	68	44	34	40	58	39	50	54	53	42	55	47	37	28	38	40	44	35	39	39	43	53	52	46.5
Weeksbury	Maximum	71	74	77	75	85	88	86	91	87	85	84	75	72	71	70	71	65	73	72	65	64	64	76	75	78	73	77	77	77	72	74	75.6
	Minimum	37	35	35	36	51	55	53	56	46	40	34	49	45	45	46	58	44	51	55	41	37	31	35	40	37	31	36	28	41	40	46	41.7
Williamsburg §§	Maximum	71	70	73	70	87	88	78	75	82	65	69	65	75	70	71	81	77	63	62	56	59	60	69	74	70	60	65	68	70	71	74	70.6
	Minimum	37	38	38	40	43	50	51	49	53	52	35	36	39	39	49	50	62	60	50	56	37	32	29	29	32	31	29	29	34	39	48	41.8

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

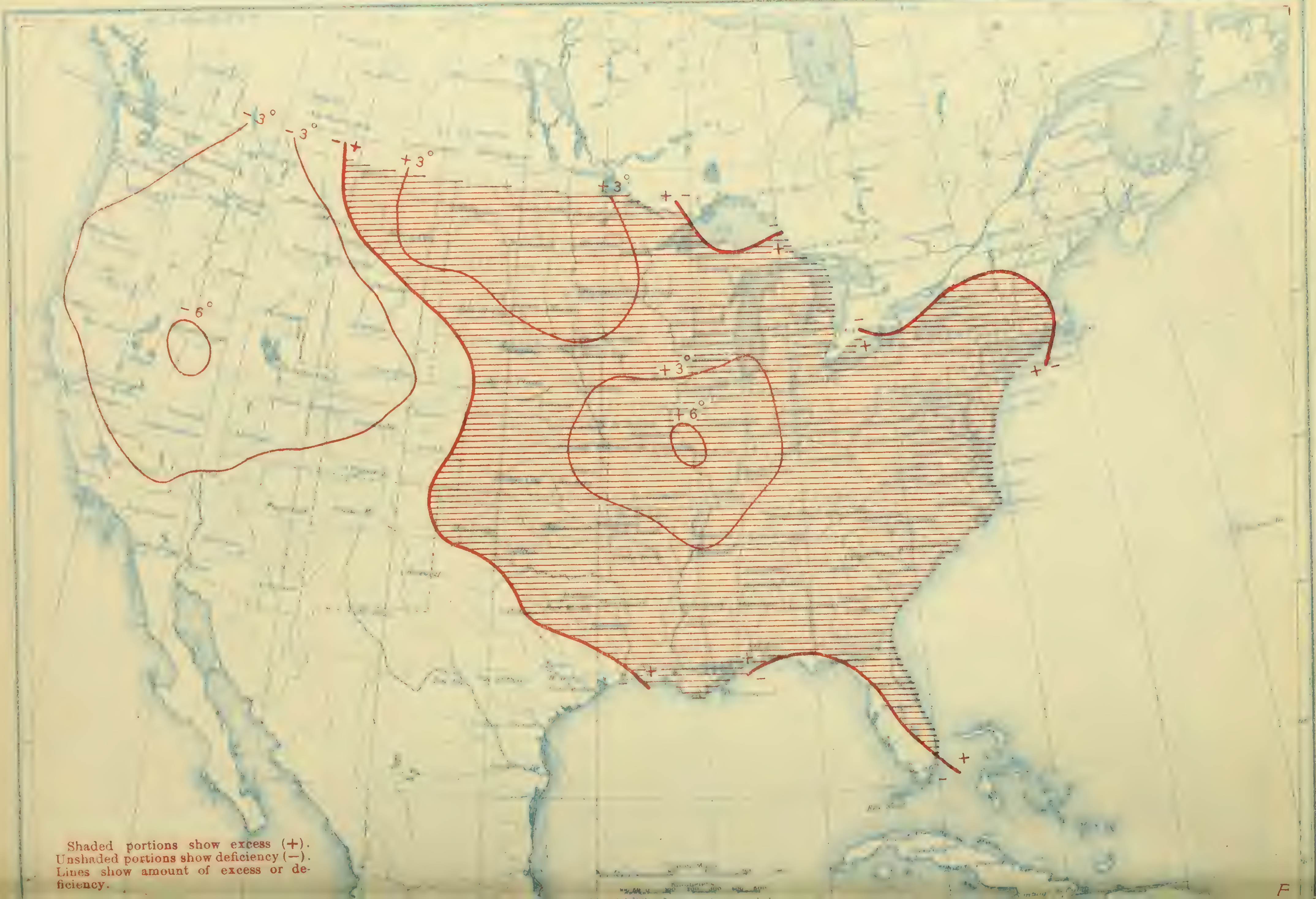
KENTUCKY SECTION

NOVEMBER, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 20, 1916

Departure of the Mean Temperature from the Normal, November, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXI. Louisville, Ky., November, 1916. No. 11.

GENERAL SUMMARY.

The most noteworthy features of the month's weather were he sharp variations in temperature, the marked deficiency in recipitation, and the large number of bright, clear days. Abnormally warm weather prevailed during the first decade, eing a continuation of the fine weather of the last part of Octoer; but a decided change to colder occurred on the 13th introducing the coldest period of the month. The lowest temperaure at most stations was reached on the 15th, when minima anged generally between 8° and 20°.

The average precipitation for the month was considerably ess than the normal amount. Fall grain suffered greatly for noisture, much seed failing to germinate or dying soon after ermination on account of the soil being too dry for growth. The good rains of the 22-23d relieved this situation, but came oo late to produce much growth. The extreme dryness of the tmosphere served also as a retarding agency in preventing the levelopment of young grain; and the same condition rendered lifficult the handling or marketing of tobacco during most of he month. However, for gathering corn and general outdoor vork the month was exceptionally favorable.

PRESSURE.

High pressure formations dominated weather conditions over his section in the periods, 1st-7th, 10-16th, 18th-21st, 24-27th, nd the 30th. Shallow troughs of low pressure moved over the entral valleys and Lake region the 8-9th, and 29th; but the nly low pressure formation of importance to this section was he one of the 22-23d. A deep low which overspread the outhwest the morning of the 22d, moved northeastward to the ake region with greatly increased energy by the morning of he 23d, and to Ontario by 7 p. m. of the same day. This formation brought much needed rain to this section.

The mean sea-level pressure, computed from the reports of wo stations, was 30.18 inches. The extremes were 30.56 nches on the 25th and 29.46 inches on the 23d, both at Louisville.

TEMPERATURE.

The mean temperature for the state as determined from the reports of 41 stations, was 47.8°, which is 1.8° above normal. Temperatures of 80° or higher occurred at several stations during the first week, the highest for the month being 83° at Earlington on the 5th. There were only a few days with hard freezes, minimum temperatures being relatively high for November during most of the month. The lowest for the month was 8° at Anchorage on the 15th.

PRECIPITATION.

The average precipitation for the State, computed from the records of 49 stations, was 1.52 inches, which is 2.07 inches less than the normal amount for November. The only rains of consequence were the moderate showers that occurred on the 9th in the central and western counties, on the 10th in eastern counties, the general rains of the 22-23d, and the moderate rains over the central and eastern counties on the 28th and 29th. Except for a few stations in the Licking basin and in the central counties, monthly amounts were less than 2 inches. At several stations they were but little more than 1 inch, being only about one-fourth the normal precipitation. The month's precipitation was fairly evenly distributed over the State. Monthly amounts at the various stations ranged between 0.85 inch at Alpha, and 2.25 inches at Scott. Snow flurries occurred generally over the State on the 14th.

WIND.

The total wind movement at Louisville was 9.298 miles, and at Lexington 11,113 miles, with average hourly velocities of 12.9 and 15.4 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 52 miles per hour, and at Lexington 50 miles per hour, from the southwest on the 23d at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 70 per cent, at 2 p. m. 48 per cent, and at 7 p. m. 49 per cent. These values are among the lowest on record at this station for November.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 76 and at Lexington 65. At Louisville this exceeds all previous records for November.

MISCELLANEOUS.

Rivers.—Streams were low during the month, especially the Ohio, in which navigation was possible only for light craft except where the river is controlled by dams. The inability of coal fleets to pass down the Ohio rendered more acute the coal shortage along the northern boundary of the State.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	43.1	−2.9	85	10	6.04	+2.45	..
1890	48.6	+2.6	81	19	4.87	+1.28	..
1891	43.5	−2.5	75	10	6.04	+2.45	..
1892	42.8	−3.2	78	9	3.85	+0.26	..
1893	44.3	−1.7	79	−2	3.12	−0.47	..
1894	43.3	2.7	80	8	1.32	−2.27	4
1895	45.8	−0.2	85	16	4.29	+0.70	7
1896	49.3	+3.3	80	11	5.01	+1.42	8
1897	47.8	+1.8	78	12	4.69	+1.10	10
1898	43.2	2.8	80	10	2.79	−0.80	8
1899	49.8	+3.8	79	20	2.12	−1.47	8
1900	47.0	+1.0	83	15	7.78	+4.19	8
1901	41.8	−4.2	82	11	1.52	−2.07	4
1902	53.4	+7.4	90	20	4.42	+0.83	11
1903	42.5	−3.5	81	5	3.01	−0.58	8
1904	44.7	−1.3	79	14	0.89	−2.70	3
1905	46.4	+0.4	79	14	3.55	−0.04	7
1906	46.1	+0.1	93	11	5.02	+1.43	7
1907	44.2	−1.8	75	15	3.49	−0.10	7
1908	48.6	+2.6	80	8	2.61	−0.98	7
1909	54.7	+8.7	86	19	2.29	−1.30	6
1910	41.1	−4.9	78	11	2.04	−1.55	6
1911	41.6	−4.4	85	9	4.51	+0.92	8
1912	45.2	0.8	82	10	1.22	−2.37	4
1913	50.5	+4.5	81	8	3.25	−0.34	9
1914	46.9	+0.9	83	5	1.23	−2.36	5
1915	49.8	+3.8	85	16	4.80	+1.21	9
1916	47.8	+1.8	83	8	1.52	−2.07	4

Climatological data for November, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	12	48.0	+ 2.9	83	5	13	15	43	1.15	−1.97	0.53	T.	3	22	4	4	s.	W. T. Austin.
Blandville	Ballard	445	34	49.8	+ 3.2	82	4	14	15	32	1.84	−2.62	0.78	0	5	20	3	7	sw.	E. W. Horr.
Calhoun	McLean	437	12	49.4	+ 2.0	81	4	12	15†	39	1.26	−1.94	0.73	T.	3	18	6	6	sw.	W. A. Taylor.
Earlington	Hopkins	420	25	49.2	+ 1.5	82	5	13	15	44	1.09	−3.29	0.56	T.	3	22	1	7	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	49.0	......	79	4†	12	15	41	1.08	......	0.61	......	3	......	......	......	......	C. R. Lovell.
Hopkinsville	Christian	524	19	52.0	+ 3.7	79	4†	15	15	41	1.20	−2.95	0.80	......	3	23	1	6	w.	W. F. Randle.
Marion	Crittenden	571	17	51.2	+ 2.9	80	5	15	15	36	1.71	−2.38	0.93	T.	2	13	9	8	nw.	B. C. Paris.
Mayfield	Graves	364	7	48.6	......	79	5†	14	15	42	1.95	......	1.00	......	3	......	......	......	......	J. N. Davis.
Owensboro	Daviess	479	18	47.2	− 0.3	80	4†	16	15	43	1.08	−2.37	0.50	T.	5	20	2	8	se.	Henry S. Berry.
Paducah	McCracken	341	17	51.7	+ 2.9	81	4†	16	15	35	1.94	−2.40	0.90	......	4	25	1	4	......	E. Futrell, Jr.
Princeton	Caldwell	529	8	ᵇ52.0	+ 5.5	79ᵇ	4†	22ᵇ	26	34ᵇ	1.30	−1.93	0.70	T.	2	18	11	1	sw.	Dr. J. A. H. Miller.
Russellville	Logan	590	5	46.2	......	79	4†	11	14	43	1.83	......	1.20	......	3	20	4	6	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	22	51.0	+ 1.5	80	6	17	16	35	0.85	−2.88	0.50	T.	3	22	4	4	w.	W. W. Hicks.
Anchorage	Jefferson	700	14	44.8	+ 0.3	80	6	8	15	44	1.48	−1.49	0.86	T.	3	23	1	6	sw.	C. E. Barret.
Bardstown	Nelson	637	18	47.2	+ 0.2	80	5	12	14†	43	2.00	−1.38	1.20	T.	4	17	4	9	se.	Chas. M. Talbott.
Bowling Green	Warren	500	26	49.4	+ 2.5	80	5	15	15	41	1.67	−1.94	1.08	......	3	22	5	3	w.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	......	......	......	......	......	......	......	1.38	−2.29	0.70	......	6	......	......	......	......	C. L. Hurt.
Cloverport	Breckenridge	375	2	......	......	......	......	......	......	......	1.32	......	0.57	0.1	6	......	......	......	......	W. A. Cockerill.
Eubank	Pulaski	1177	21	ᵇ45.6	+ 1.1	75	7	12	16	43	1.72	−1.31	0.94	......	6	20ᵇ	2ᵇ	6ᵇ	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	46.0	− 0.2	76	4	14	15	38	1.75	−1.66	1.05	T.	6	19	3	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	48.4	− 0.1	76	4†	14	15	31	1.35	−2.18	0.70	T.	5	8	17	5	nw.	J. E. Newman.
Greensburg	Green	581	23	45.6	+ 0.9	80	6	12	16	43	1.95	−1.73	0.90	......	7	17	7	6	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	......	......	......	......	......	......	......	1.22	−1.49	0.56	......	6	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	18	48.2	+ 1.5	76	4†	15	15	30	1.02	−2.19	0.54	T.	2	22	1	7	sw.	W. J. Piggott.
Junction City	Boyle	1087	21	48.0	+ 5.4	78	6	12	16	42	1.68	−1.46	0.86	......	6	21	2	7	w.	H. F. Ewing.
Leitchfield	Grayson	635	20	46.9	+ 0.6	79	6	10	15	37	1.34	−2.59	0.67	......	4	22ᵃ	3ᵃ	4ᵃ	sw.	John E. Stone.
Lexington	Fayette	989	31	47.4	+ 2.7	76	6	14	15	27	1.25	−2.23	0.70	T.	6	20	3	7	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	ᵇ47.0	+ 0.8	78	2	10	15	44	1.55	−1.41	0.83	T.	7	19	2	9	......	Loretto Academy.
LOUISVILLE	Jefferson	525	43	48.5	+ 2.2	78	6	18	15	28	1.17	−3.01	0.75	T.	6	21	1	8	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	6	47.1	......	77	4†	14	15	34	1.40	......	0.73	0.1	5	20	3	7	sw.	Wm. I. Hunt.
St. John	Hardin	777	19	45.6	+ 0.2	78	5†	11	15	40	1.96	−1.52	0.90	0.2	7	22	2	6	......	Sisters of Loretto.
Scott	Kenton	900	18	46.5	+ 1.5	77	4	10	15	36	2.25	−0.55	1.27	0.5	5	18	4	8	s.	E. B. Wilson.
Shelbyville	Shelby	825	26	45.4	+ 1.5	80	6	10	15	47	1.94	−2.01	1.05	0.3	6	22	3	5	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	43.8	− 1.1	77	4	10	15	43	1.70	−1.40	1.10	0.2	5	24	1	5	sw.	E. D. Bourne.
Williamstown	Grant	943	13	46.1	+ 1.0	78	3	10	15	41	2.11	−0.23	0.97	T.	7	17	5	8	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	45.6	+ 1.9	81	7	10	25	48	1.60	−1.15	0.44	T.	6	20	4	6	sw.	A. H. Bowman.
Berea	Madison	1070	14	50.6	+ 3.4	79	6	15	15†	49	1.91	−0.99	0.61	......	5	23	4	3	nw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	......	......	......	......	......	......	......	1.56	−0.89	0.60	T.	6	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	......	......	......	......	......	......	......	1.61	−2.01	0.85	T.	6	......	......	......	s.	J. V. Oldham.
Farmers	Rowan	668	9	46.5	+ 1.5	70	4†	10	16	43	0.90	−1.83	0.30	T.	4	......	......	......	......	Mrs. Lurlene Triplett.
Hazard	Perry	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Jackson	Breathitt	776	4	......	......	......	......	......	......	......	1.33	......	0.50	......	5	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	1	......	......	......	......	......	......	......	1.59	......	0.50	0	9	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	11	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	G. M. Guerin.
Manchester	Clay	1400	4	......	......	......	......	......	......	......	1.26	......	0.45	......	7	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	44.4	− 0.2	78	4†	14	15†	52	1.35	−1.49	0.58	T.	6	23	2	5	se.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	47.2	+ 1.4	77	6	14	16	45	1.69	−1.82	1.01	......	0	23	5	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	45.6	+ 1.3	77	6	14	15	40	2.10	−1.35	0.70	......	8	19	4	7	w.	W. R. McKee.
Pikeville	Pike	634	9	......	......	......	......	......	......	......	1.62	−1.25	0.43	......	8	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	49.6	+ 2.8	79	6	15	15	37	1.29	−1.40	0.44	......	6	16	7	7	s.	J. W. Crooke.
Weeksbury	Floyd	1216	2	50.2	......	79	7	18	16	44	1.15	......	0.50	......	5	23	0	7	......	O. A. Lund.
Williamsburg	Whitley	939	19	46.6	− 0.5	78	13	14	16†	47	1.58	−1.35	0.50	T.	6	17	6	7	s.	N. C. Jones.
State averages and extremes				47.8	......	83	5	8	15	52	1.52	......	1.27	T.	4	20	4	6	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are use in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky

Daily Precipitation for November, 1916.

Stations	Day of month																															[illegible]
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																
aver Dam ‖ G									.53					T									.52					.10	T.			1.15
andville M									.78				T.	.16			.01					.51	.32									[illegible]
lhoun G									.73					.04			T.					T	.49	T.					T.			[illegible]
rlington‖ G										.17	.56			T.									.36						T			[illegible]
eenville									.61														.12					[illegible]				[illegible]
pkinsville C									.80								.05						.35					T				1.20
rion O									.93					T			T.					T	.78									1.71
yfield									1.00														.85							.10		1.95
ensboro ‖ O									[illegible]	.50				.06								T.	.30	.02					T.			[illegible]
ducah O									.90								.06				.20	.78										1.94
inceton									.70					T			T.					T.	.60									1.30
ssellville									.43														1.20				.20					1.83
Central Division																																
pha C									.15			T.	T.	T.								.50	.20					T				0.85
chorage O									.43				T.									T.	.86					.19				1.48
rdstown‖ S									.40					T.							1.20					.15	.25					2.00
wling Green ‖ G										.38													1.08					.21				1.67
rnside ‖ C										.32			T.	.06	T.								.70	.15				.10	.05			1.38
overport‖ O								.14	.57					.10					T.				.42	.08					.01	T.		1.32
bank‖ C										.38			.05	.05									.94					.14	.16			1.72
ankfort‖ K										.32				.04									1.05	.12				.05	.17			1.75
anklin G									.36					T.			T.					.09	.70					.12	.08			1.35
eensburg‖ G										.61			.01	.05				T.					.90	.09				.14	.15			1.95
gh Bridge‖ K										.40				.04									.56	.07				.09	.06			1.22
ington O									.48					T.									.54					T.	T.			1.02
nction City K									.42			T.	T.	.14									.86	.05				.15	.06			1.68
itchfield G									.49					T.								*	.67					.18				1.34
xington *** K									.28			T.		.01			T.					.07	.63					.12	.14			1.25
retto S									.45	.02				T.				.10	.02				.83	.07				.06				1.55
uisville*** O									.26				.01	.01								.37	.38					.14	T.			1.17
Do (Cherokee Park) O									.37					.08									.73					.20	.02			1.40
John‖ S										.45				.15									.90	.10				.13	.12	.11		1.96
ott L									.43					.23									1.27	.02				.30				2.25
elbyville S										.45				.03									1.05	.10				.09	.22			1.94
ylorsville S									.25					.03									1.10	.06				.26				1.70
illiamstown L										.38			.01	.12									.97	.30				.01	.32			2.11
Eastern Division.																																
attyville ‡ K										.44				.06	T								.40	.30				.20	.20			1.60
rea K									.48	.10				.45									.61					.27				1.91
tlettsburg B										.44		T.		.14									.14	.60				.02	.22			1.56
lmouth‖ L										.25				.13									.85	.10				.04	.24			1.61
rmers L													T.	T.	.16								.30	.30					.14	T.		0.90
azard K																																
ckson‖ K										.50		T.	T.	T.	T.								.25	.24				.10	.24			1.33
ndon C										.30		.11	.08	.10	.06								.30	.50				.10	.04			1.59
uisa B																																
anchester‖ K										.45			.11	.09									.12	.32				.07	.10			1.26
aysville‖ O										.40				.14	T.								.58	.12				T.	.08	.03		1.35
iddlesboro C										.29		.05	.04										1.01					.22	.08			1.69
ount Sterling‖ L										.57			.02	.35									.70	.20				.15	.07	.04		2.10
keville B										.43		.28	T	.08									.06	.32				.08	.26	.12		1.62
chmond‖ K										.39			T.	.11									.44	.12				.10	.13			1.29
eeksbury B										.50		.20					.05						.15					.25				1.15
illiamsburg‖ C										.35		.08			T.								.50	.30				T.	.05	.30		1.58

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

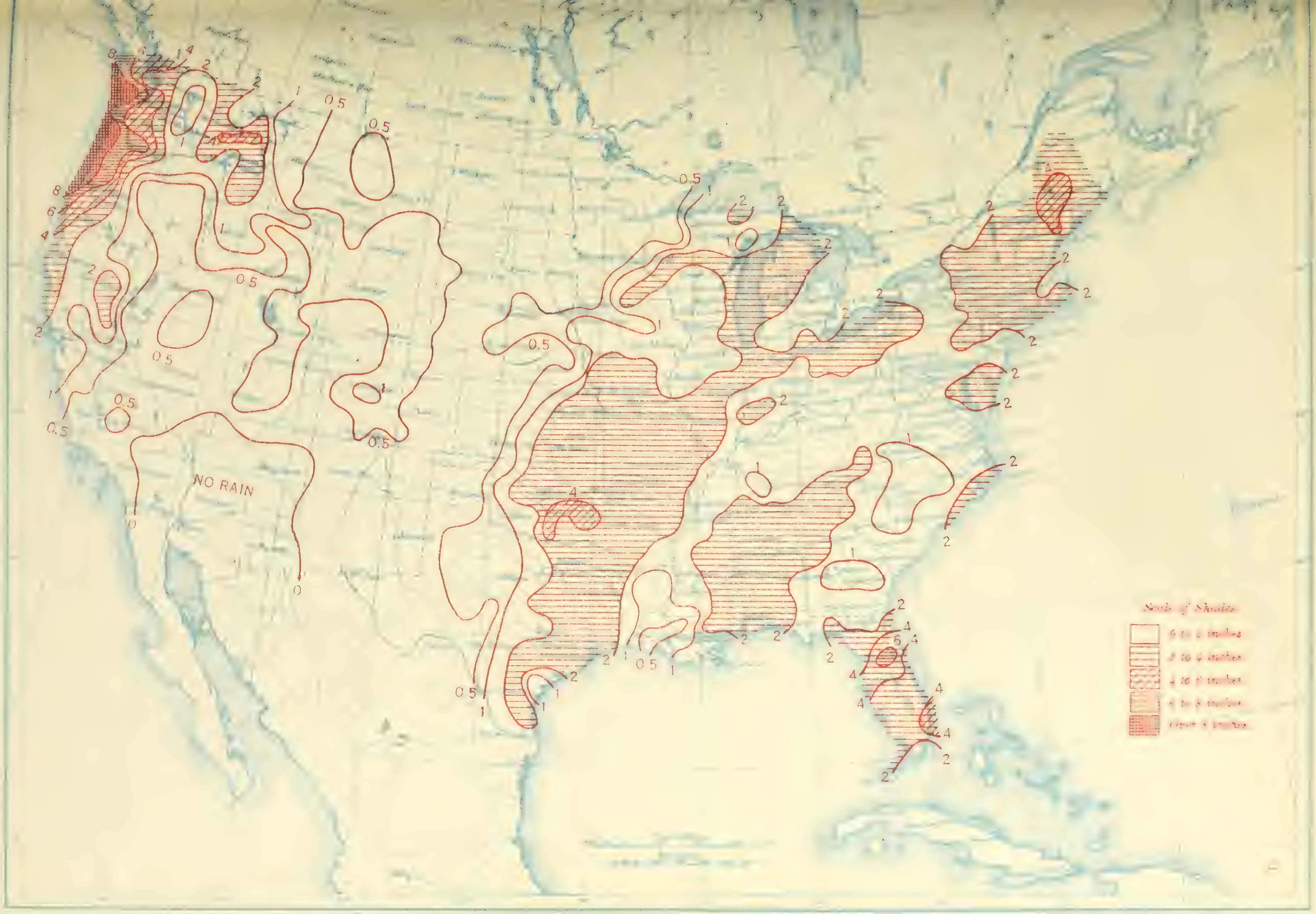
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for November, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	72	72	73	64	83	80	77	75	64	59	67	71	46	30	33	43	49	58	64	65	68	62	52	41	40	52	60	60	61	52	..	59.
	Minimum	34	31	30	45	49	46	53	53	61	30	32	33	41	27	13	16	32	25	40	35	31	41	42	32	19	29	36	49	50	33	..	36.4
Blandville	Maximum	69	72	73	82	78	78	75	76	68	64	68	71	60	31	35	50	42	49	65	65	66	63	54	45	44	54	60	62	57	56	..	61.1
	Minimum	37	45	46	55	53	53	54	57	45	40	41	43	31	15	14	21	33	25	34	39	41	49	41	31	21	29	38	52	43	33	..	38.6
Calhoun	Maximum	72	74	72	81	80	79	75	76	72	62	71	74	66	39	34	46	49	48	65	67	67	65	65	44	44	54	63	61	59	55	..	62.0
	Minimum	33	38	34	50	48	49	55	53	46	34	35	39	37	19	12	12	35	22	30	37	33	46	41	30	22	26	38	50	49	30	..	36.1
Earlington §§	Maximum	75	75	77	81	82	80	81	78	57	66	77	75	47	31	32	48	49	51	68	68	70	67	47	42	46	58	63	61	57	55	..	62.1
	Minimum	33	40	33	48	71	47	45	55	56	33	33	38	39	21	13	15	30	23	27	42	33	36	45	33	17	24	38	45	51	27	..	36.4
Greenville	Maximum	71	72	74	79	79	79	77	76	70	62	72	73	60	40	36	46	50	49	65	66	66	67	64	44	43	54	61	61	60	54	..	62.
	Minimum	32	40	33	50	51	46	55	53	44	32	32	37	39	22	12	14	35	22	29	40	32	44	42	31	16	22	40	49	50	28	..	35.7
Hopkinsville	Maximum	70	75	74	79	79	79	76	75	71	63	71	70	69	61	56	51	50	50	65	65	64	67	65	52	57	56	62	61	59	71	..	65.4
	Minimum	34	39	39	47	46	41	54	53	47	54	55	50	58	21	15	18	34	25	25	35	33	47	43	33	20	22	35	50	49	34	..	38.
Marion	Maximum	70	72	72	78	80	79	76	76	68	62	70	72	70	35	35	48	48	48	65	65	65	63	56	44	42	54	60	64	60	54	..	61.7
	Minimum	61	67	42	42	56	66	54	55	45	32	39	61	35	18	15	19	36	26	39	42	42	47	41	31	30	19	39	38	49	32	..	40.
Mayfield §§	Maximum	71	73	74	75	79	79	76	76	56	63	70	72	50	35	37	49	52	52	65	64	67	65	45	45	43	55	61	63	62	67	..	61.4
	Minimum	34	43	39	42	43	51	50	55	55	38	34	36	38	21	14	18	33	24	23	34	37	38	43	31	19	27	39	49	42	28	..	35.
Owensboro §§	Maximum	68	68	70	80	80	78	75	74	50	61	68	72	42	28	32	44	46	50	63	66	66	63	45	41	44	54	60	62	59	51	..	58.7
	Minimum	34	41	39	37	47	50	52	52	48	35	38	40	39	19	16	18	30	25	29	35	34	43	44	32	20	22	35	40	49	32	..	35.
Paducah (Lone Oak)	Maximum	71	77	71	81	81	80	76	79	76	66	72	71	74	54	49	35	48	50	75	65	65	60	58	49	50	56	51	61	64	55	..	64.1
	Minimum	40	47	45	55	52	54	57	56	46	40	40	40	41	19	11	22	30	36	41	39	49	42	31	26	23	30	40	44	44	33	..	39.
Princeton	Maximum	69	72	71	79	79	78	77	76	68	63	70	73	68	38	35	50	48	..	65	65	65	65	56	45	42	55	62	61	58	..	..	[b]62.
	Minimum	41	42	46	52	63	50	51	52	45	44	59	57	37	26	26	32	36	..	36	43	31	44	41	35	32	22	47	34	36	..	..	[b]41.
Russellville §§	Maximum	73	75	77	79	79	75	76	65	62	73	74	72	33	35	46	49	56	62	60	64	68	46	43	54	55	60	62	60	52	58	..	60.
	Minimum	30	34	38	47	49	49	46	52	31	31	34	39	22	11	13	19	21	22	31	34	34	40	30	16	18	31	33	38	32	27	..	31.
Central Division																																	
Alpha	Maximum	66	70	70	72	74	80	76	68	71	62	69	63	70	55	36	41	52	50	60	62	65	65	56	46	45	54	58	56	59	53	..	60.
	Minimum	35	40	35	60	60	47	59	60	62	39	34	50	55	28	19	17	40	24	26	50	26	50	47	34	21	20	43	52	53	39	..	41.
Anchorage	Maximum	68	70	67	76	75	80	78	76	66	59	68	71	52	36	30	42	46	47	67	65	63	66	58	42	37	52	56	54	54	49	..	59.
	Minimum	28	33	27	42	45	42	46	44	34	27	31	35	36	15	8	12	27	15	23	31	27	44	39	28	13	19	33	47	42	27	..	30.
Bardstown §§	Maximum	74	71	79	78	80	78	70	65	62	72	75	58	30	30	42	49	49	64	66	68	57	42	40	54	62	58	62	53	57	70	..	60.
	Minimum	39	30	36	51	50	50	52	59	31	33	41	47	27	12	12	19	20	21	33	35	36	32	18	20	27	37	48	35	27	35	..	33.
Bowling Green§§	Maximum	70	74	75	78	80	79	77	76	65	74	74	76	55	30	37	55	54	64	65	66	64	70	55	44	52	55	63	63	62	63	..	63.
	Minimum	34	36	37	37	48	47	49	48	60	34	35	45	45	25	15	17	25	25	26	26	33	39	49	32	20	25	25	39	35	35	..	34.
Eubank§§	Maximum	68	71	61	74	72	74	75	74	71	61	71	66	68	61	51	42	56	53	58	..	..	28	65	55	42	52	60	56	62	49	..	[b]60.
	Minimum	28	29	31	31	47	45	44	42	48	31	31	46	50	29	14	12	14	17	18	26	..	..	29	31	14	15	21	33	45	34	..	[b]30.
Frankfort	Maximum	62	67	63	76	70	75	73	72	69	58	63	69	62	52	30	40	49	46	59	64	60	65	62	45	37	50	58	56	59	55	..	58.
	Minimum	32	33	28	38	43	64	41	38	47	32	32	37	45	24	14	15	18	19	23	31	29	35	41	31	19	25	30	45	49	34	..	33.
Franklin	Maximum	65	71	58	76	75	76	72	73	66	58	67	72	67	43	33	43	52	49	50	53	52	67	58	46	39	52	60	58	61	54	..	58.
	Minimum	36	46	40	49	54	53	53	49	42	33	36	51	40	21	14	18	32	25	32	39	39	48	42	29	20	29	36	48	45	34	..	37.
Greensburg§§	Maximum	65	72	67	75	76	80	78	76	71	61	72	73	67	29	34	43	55	49	62	65	63	70	58	43	42	54	62	58	64	50	..	61.
	Minimum	29	30	28	33	42	39	43	43	52	29	29	35	49	28	13	12	17	19	20	23	27	28	40	32	17	17	20	34	47	29	..	30.
Irvington	Maximum	64	68	66	76	75	76	74	72	66	58	64	69	61	38	32	42	49	46	62	64	64	65	63	43	38	51	59	57	61	50	..	59.
	Minimum	34	42	38	56	50	51	56	52	44	34	37	41	38	22	15	17	34	25	33	40	37	43	42	31	20	27	37	37	50	33	..	37.
Junction City	Maximum	69	73	66	77	76	78	77	75	72	62	73	72	68	53	34	41	48	48	63	65	67	68	60	45	43	54	61	57	62	55	..	62.
	Minimum	34	33	31	39	50	43	50	48	48	30	31	41	51	24	13	12	32	18	22	37	30	35	42	30	18	18	31	45	49	32	..	33.
Leitchfield	Maximum	67	70	69	77	77	79	76	..	67	59	70	..	74	42	33	43	49	49	62	65	65	69	65	44	40	52	62	58	64	55	..	[b]60.
	Minimum	30	38	33	42	45	47	43	..	44	31	34	..	42	21	10	13	29	19	25	36	32	40	40	30	16	23	33	47	50	30	..	[b]33
Lexington	Maximum	62	65	64	73	70	76	73	71	67	56	66	68	62	35	28	38	44	42	57	62	62	65	57	40	35	49	58	56	57	44	..	56.
	Minimum	43	49	44	50	54	53	54	51	40	35	40	54	35	19	14	19	29	25	32	42	44	45	38	24	19	28	37	47	43	33	..	38.
Loretto	Maximum	66	78	67	76	75	78	76	74	77	59	70	72	..	52	32	41	49	47	62	64	65	68	63	48	39	52	60	57	..	61	..	[b]61.
	Minimum	28	34	25	41	46	42	52	50	46	30	29	47	39	22	10	12	33	12	21	40	29	34	40	30	16	20	36	46	..	31	..	[a]32.
Louisville	Maximum	65	68	64	77	72	78	75	74	65	58	66	70	55	31	32	41	47	46	61	64	62	65	57	41	38	51	60	56	59	49	..	58.
	Minimum	41	49	42	52	52	50	59	55	40	38	40	43	31	21	18	20	33	28	34	45	38	44	41	26	22	29	41	50	46	36	..	38
Do. (Cherokee Park)	Maximum	64	68	64	77	73	77	75	74	70	58	64	70	67	45	31	40	46	45	60	64	61	65	62	43	37	50	59	55	60	57	..	59.
	Minimum	34	37	31	46	46	43	48	50	46	32	34	37	40	24	14	16	32	19	27	38	32	38	40	30	20	25	35	48	49	33	..	34.
St. John §§	Maximum	69	71	68	77	78	78	71	74	65	58	69	72	56	25	35	40	49	49	61	64	65	66	55	42	40	51	60	57	61	53	..	59.
	Minimum	29	34	32	41	45	45	47	48	51	28	31	38	41	25	11	12	16	19	22	30	30	30	48	30	17	20	22	35	47	32	..	31.
Scott	Maximum	66	67	62	77	70	76	75	72	65	57	62	70	63	45	30	38	46	45	61	65	55	61	58	41	37	50	59	63	57	52	..	58.
	Minimum	35	42	31	46	40	43	52	49	45	34	36	34	41	22	10	15	30	22	29	40	34	35	41	30	17	29	35	47	50	31	..	34.
Shelbyville §§	Maximum	69	71	68	79	75	80	78	76	65	62	67	75	56	28	28	42	48	48	62	67	66	67	56	40	40	41	49	55	60	51	..	59.
	Minimum	31	32	29	32	46	45	46	46	50	30	33	36	42	26	10	13	18	16	20	32	30	33	47	30	17	21	27	36	47	31	..	31.
Taylorsville	Maximum	64	67	64	77	73	76	74	73	66	57	64	71	61	44	32	40	49	46	60	64	60	62	43	43	38	50	58	56	60	56	...	58.
	Minimum	27	29	23	34	41	37	39	37	49	31	29	34	41	24	10	12	27	15	19	25	25	41	31	27	16	17	27	39	47	30	..	29.
Williamstown §§	Maximum	68	69	78	67	70	80	77	74	64	64	65	74	60	25	32	40	47	46	66	64	58	66	58	38	38	42	60	53	56	48	..	58.
	Minimum	37	40	39	46	46	45	36	48	51	34	39	39	50	23	10	15	19	21	27	33	23	34	40	31	17	17	28	42	48	31	..	34
Eastern Division																																	
Beattyville §§	Maximum	69	75	70	78	77	80	81	79	75	65	75	71	75	34	35	42	56	49	63	52	69	74	59	44	44	58	65	57	67	50	..	62.
	Minimum	32	28	28	30	36	39	40	35	38	42	29	29	49	32	14	13	13	24	21	25	32	27	32	33	10	12	19	20	39	31	..	28.
Berea	Maximum	70	73	77	77	76	79	77	75	71	65	65	69	72	60	40	47	55	56	63	58	56	69	65	65	44	55	63	65	67	57	..	64.
	Minimum	32	38	31	28	41	45	56	55	52	37	31	41	54	50	15	15	35	20	28	35	36	36	43	32	19	22	36	45	54	35	..	36
Farmers	Maximum	66	68	65	76	74	76	76	76	74	60	65	70	60	58	55	42	45	45	60	65	62	69	64	45	39	74	64	60	60	61	..	62.
	Minimum	28	25	24	35	41	38	38	37	48	33	29	38	30	26	24	10	21	24	18	26	22	33	41	34	18	48	28	34	33	30	..	30
Maysville§§	Maximum	66	70	65	78	72	77	78	76	70	59	67	76	63	32	31	41	47	48	62	68	78	69	61	41	39	53	61	54	61	48	..	59
	Minimum	32	31	26	27	36	37	37	37	37	31	30	30	45	29	14	14	15	20	20	32	28	28	33	35	18	18	27	33	42	31	..	29
Middlesboro	Maximum	68	73	70	71	76	77	74	72	75	66	73	73	65	63	32	42	54	50	57	60	61	67	59	50	42	51	58	52	64	60	..	61
	Minimum	33	28	29	31	37	40	36	33	57	46	41	43	46	32	20	14	23	30	18	22	23	30	49	38	19	16	23	34	48	41	..	32.
Mount Sterling§§	Maximum	63	67	61	75	70	77	76	73	73	58	65	69	72	30	29	39	46	44	59	64	63	68	68	39	37	51	59	54	62	40	..	58
	Minimum	33	37	28	35	44	44	45	40	49	30	30	35	53	29	14	15	19	23	24	37	33	33	40	32	17	19	32	39	46	32	..	32
Richmond §§	Maximum	67	71	68	76	74	79	77	75	67	60	72	71	70	33	33	41	47	46	59	65	67	68	57	42	39	53	61	56	65	54	..	60
	Minimum	37	44	36	48	50	48	55	49	58	35	35	19	54	29	15	20	30	23	29	40	41	41	45	32	18	25	35	40	48	53	..	38
Weeksbury	Maximum	75	71	76	73	77	78	79	75	76	78	75	75	70	66	40	52	58	62	60	68	68	70	67	59	43	57	67	57	58	64	..	66
	Minimum	37	34	32	37	40	43	44	45	39	37	34	32	47	34	20	18	26	33	27	25	32	38	52	34	22	20	34	46	37	20	..	34
Williamsburg §§	Maximum	66	74	70	72	76	75	73	75	74	72	70	65	78	68	63	43	58	57	60	65	64	67	59	44	50	52	62	58	64	58	..	64
	Minimum	32	33	30	31	40	39	38	37	41	39	35	34	31	30	21	14	15	24	20	25	24	24	30	39	14	14	20	22	48	21	..	28

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.



Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
0
0.5
1
2
4
6
8

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CLIMATOLOGICAL DATA

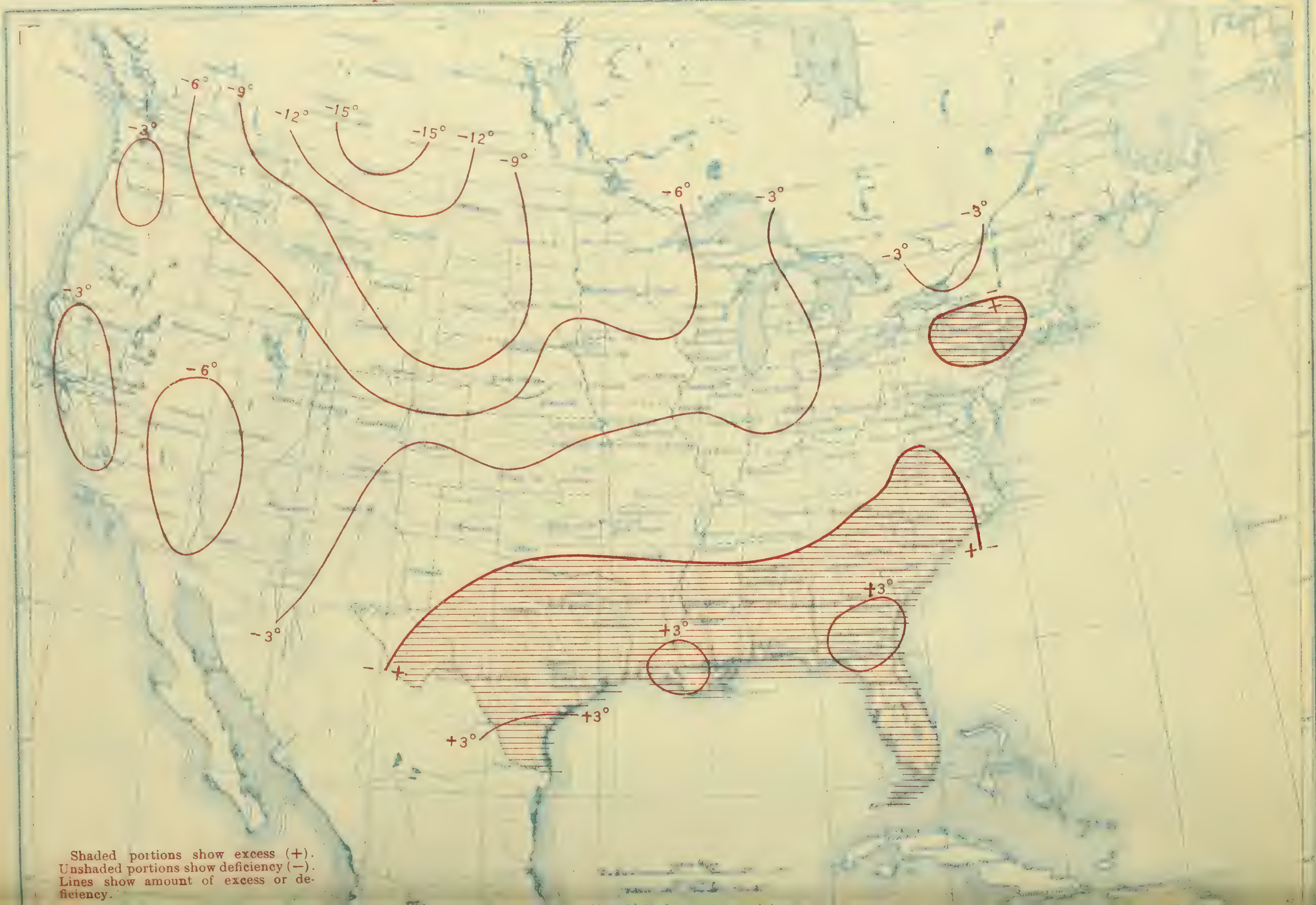
KENTUCKY SECTION

DECEMBER, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JANUARY 23, 1917

Departure of the Mean Temperature from the Normal, December, 1916.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XXI. Louisville, Ky., December, 1916. No. 12.

GENERAL SUMMARY.

Warm weather prevailed during the first week, with mean emperatures 4° to 20° above normal; but, with the exception f two or three days, severe wintry conditions characterized the emainder of the month. During the period, 12th-23d, mean emperatures on most days were from 10° to 20° below normal, he coldest days being the 15th, 16th, 19th, 22d, and 23d, with inimum temperatures of zero or below at many stations. Remarkable features of the weather were: the thunderstorms that ccurred at many places in the State the night of the 21st-22d, vith temperatures generally below freezing, and in some cases s low as 16°; the misting rain on the afternoon of the 21st at ouisville and other places in the northern part of the State vith a temperature of 22° to 24°, and the tornado in the lower reen River district on the 4th, more fully described elsewhere n this issue. Thunderstorms also occurred generally over the tate on the 4th, and in the central counties on the 26th, 27th nd 28th.

Warmer weather, attended by widespread fog and heavy ains on the 26-27th, melted away the snow covering, and also nade possible the handling of tobacco, which had been greatly indered by the cold spell.

The snowfall for the month was unusually heavy for December, and there was snow covering on the ground during most of he severe weather.

PRESSURE.

A remarkably large number of both high and low pressure ormations passed over or near this section during the month. lso the development and movement of both the "Highs" and he "Lows" were unusually rapid. There were ten distinctive "Lows" and seven distinctive "Highs", distributed during the nonth about as follows: High pressure areas, 1st-2d; 6th; -10th; 13-14th; 22-23d: 25th, and 28th-31st. Low pressure reas, mostly long deep troughs, the 4-5th; 7-8th; 11th; 15th; 16th; 18th; 19-20th; 21st-22d; 24th, and 26-27th.

The mean sea-level pressure, based on the reports of two stations, was 30.09 inches. The extremes were 30.61 inches at ouisville on the 29th, and 29.59 inches at Lexington on the 22d.

TEMPERATURE.

The average temperature for the State, as determined from the records of 40 stations, was 35.5°, which is 2.0° below normal. Temperatures of 70° or higher occurred on the 4th, th and 7th, the highest for the month being 74° at Paducah on the 4th and at Alpha on the 5th. The lowest temperature was −14° at Farmers on the 19th, making the temperature range for the month 88°. Beattyville, Middlesboro and Williamsburg reported minimum temperatures of −12° on the 19th.

PRECIPITATION.

The average precipitation for the State, computed from the records of 49 stations, was 4.23 inches, which is 0.44 inch above normal. About one-fourth of this fell as snow, which averaged more than 10 inches over the State, and ranged between 4.5 inches in the extreme western counties and 19.0 inches in the south-central district. The heaviest snowfalls occurred on the 14th and 21st. Precipitation was frequent during the month, occurring generally over the State on the 4th, 8-9th, 14-15th, 18th, 20th-22d, and 26-28th. The heavy rains of the 27th, together with the melting snow, caused the first considerable run-off for several months, resulting in rapid rises in the streams of the State. Amounts at the various stations ranged between 2.40 inches at Louisa and 5.87 inches at Alpha. The distribution over the State was in general quite uniform.

WIND.

The total wind movement at Louisville was 10,048 miles, and at Lexington 11,782 miles, with average hourly velocities of 13.5 and 15.8 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 40 miles per hour from the south on the 4th, and at Lexington 44 miles per hour from the west on the 8th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 76 per cent, at 2 p. m. 60 per cent, and at 7 p. m. 63 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 44 and at Lexington 42.

MISCELLANEOUS.

December 4.—A barn was struck by lightning and destroyed near Lebanon Junction. Lightning struck the spire of the Walnut Street Baptist Church, Louisville.

The following is extracted from a report of Mr. W. A. Taylor, Voluntary Observer at Calhoun, Ky., concerning the tornado and hailstorm which occurred in that locality December 4:

"The course of the storm was nearly east. Two heavy hailstorms occurred at Calhoun, but no wind. The first hailstorm occurred about 2.30 p. m. The hail at first was quite small, but increased in size until the hailstones became as big as partridge eggs, but irregular in shape. The second hailstorm occurred about 3 p. m. The hailstones were almost perfectly round, approximately 1-4 inch in diameter, and phenomenally numerous, absolutely covering the ground. The tornado occurred during the first hailstorm. I, together with many other

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 or more.
1889	50.2	+12.7	76	13	1.57	−2.22	.
1890	37.8	+0.3	70	12	3.51	−0.28	..
1891	42.4	+4.9	70	15	4.10	+0.31	
1892	34.6	−2.9	74	3	4.22	+0.43	
1893	39.0	+1.5	78	10	2.59	−1.20	
1894	38.7	+1.2	76	−11	4.31	+0.52	10
1895	38.8	+1.3	77	6	4.43	+0.64	9
1896	39.6	+2.1	73	7	1.82	−1.97	4
1897	38.0	+0.5	72	3	3.75	−0.04	10
1898	34.1	−3.4	70	−12	2.74	−1.05	8
1899	34.8	−2.7	70	−15	4.26	+0.47	10
1900	38.6	+1.1	70	12	2.59	−1.20	8
1901	32.3	−5.2	72	−22	4.90	+1.11	10
1902	36.7	−0.8	72	−3	7.36	+3.57	12
1903	30.7	−6.8	58	0	2.88	−0.91	7
1904	36.4	−1.1	72	−2	4.30	+0.51	11
1905	37.3	−0.2	66	11	[illegible]	+0.59	8
1906	39.0	+1.5	76	9	5.64	+1.85	15
1907	38.5	+1.0	70	8	3.20	−0.59	11
1908	39.8	+2.3	74	7	2.42	−1.37	9
1909	29.9	−7.6	79	−14	3.46	−0.33	9
1910	31.1	−6.4	66	3	3.37	−0.42	8
1911	41.6	+4.1	74	11	6.25	+2.46	12
1912	37.2	−0.3	73	5	3.98	+0.19	[illegible]
1913	39.5	+2.0	70	11	2.73	−1.06	7
1914	32.8	−4.7	70	−16	5.22	+1.43	11
1915	37.0	−0.5	64	9	7.56	+3.77	12
1916	35.5	−2.0	74	−14	4.23	+0.44	10

Climatological data for December, 1916.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	12	36.2	+ 0.2	70	7	0	15	42	3.69	−0.03	1.36	8.0	7	13	11	7	s.	W. T. Austin.
Blandville	Ballard	445	34	37.0	+ 0.2	72	4$^+$	− 2	15	35	4.51	+0.56	1.91	4.5	8	12	9	10	sw.	E. W. Horr.
Calhoun	McLean	437	12	35.8	− 2.5	71	7	− 4	15	46	4.86	+1.00	1.13	11.0	12	16	10	5	nw.	W. A. Taylor.
Earlington	Hopkins	420	25	36.2	− 3.0	73	7	− 5	15	45	3.58	−0.28	1.63	8.0	8	18	2	11	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	36.1	......	70	7	2	15	47	4.23	......	1.10	9.0	12	.....	.....	.....	.....	C. R. Lovell.
Hopkinsville	Christian	524	19	39.4	+ 1.6	70	7	4	16$^+$	43	5.63	+0.86	1.10	13.0	9	18	5	8	w.	W. F. Randle.
Marion	Crittenden	571	17	36.0	− 1.1	72	7$^+$	3	15	41	5.03	+1.15	1.39	7.0	8	7	14	10	se.	B. C. Paris.
Mayfield	Graves	364	7	36.3	......	72	4$^+$	− 5	15	40	4.61	......	1.70	6.2	8	.....	.....	.....	.....	J. N. Davis.
Owensboro	Daviess	479	18	37.2	+ 0.6	71	7	−11	15	54	3.38	−0.48	1.28	8.0	11	11	8	12	nw.	Henry S. Berry.
Paducah	McCracken	341	17	37.6	− 1.4	74	4	0	15	40	4.86	+1.02	1.78	6.4	10	14	0	17	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. J. A. H. Miller.
Russellville	Logan	590	5	34.4	......	69	6	0	15	44	3.26	......	1.10	11.5	7	9	9	13	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	22	41.4	+ 1.0	74	5	9	19	33	5.87	+1.13	1.85	19.0	8	13	6	12	w.	W. W. Hicks.
Anchorage	Jefferson	700	14	32.0	− 1.9	69	7	− 9	16	49	5.14	+1.14	1.49	12.5	10	14	7	10	se.	C. E. Barret.
Bardstown	Nelson	637	18	34.6	− 1.7	70	8	0	16$^+$	42	4.74	+0.38	1.85	15.2	10	11	2	18	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	36.7	1.6	70	7	3	19$^+$	38	4.34	+0.02	1.25	15.0	9	14	12	5	n.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24	.....	.....	.....	.....	.....	.....	.....	4.41	+0.36	1.70	2.0	9	.....	.....	.....	.....	C. L. Hurt.
Cloverport	Breckenridge	375	2	.....	.....	.....	.....	.....	.....	.....	5.21	......	1.93	8.2	11	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	37.0	− 0.6	69	7	6	19	50	4.95	+0.68	1.35	13.5	10	12	11	8	w.	P. W. Ray.
Eubank	Pulaski	1177	21	34.6	− 1.1	66	7	− 4	19	43	3.25	−0.17	1.17	6.8	9	8	5	18	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	34.8	− 2.5	67	7	− 5	19	39	4.44	+1.08	1.60	13.0	11	9	5	17	s.	Mrs. Amelia Wood
Franklin	Simpson	691	21	36.4	− 3.6	67	7	6	15	32	3.76	−0.52	1.60	11.0	10	7	15	9	nw.	J. E. Newman.
Greensburg	Green	581	23	34.0	− 2.0	70	7	− 7	19	46	3.53	−0.52	1.00	12.5	10	4	10	17	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	13	.....	.....	.....	.....	.....	.....	.....	4.46	+0.07	0.98	6.4	10	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	18	35.6	− 0.4	68	7	− 2	15	36	4.48	+0.58	1.18	9.5	11	18	2	11	sw.	W. J. Piggott.
Junction City	Boyle	1087	21	35.4	+ 0.1	68	7	10	19	43	4.28	+0.05	0.70	13.5	15	12	7	12	s.	H. F. Ewing.
Leitchfield	Grayson	635	20	35.5	− 0.3	69	7	− 3	15$^+$	42	4.39	−0.23	1.20	11.5	10	19	4	8	sw.	John E. Stone.
Lexington	Fayette	989	31	34.0	− 2.4	66	7	2	16	39	3.63	+0.31	0.80	12.5	16	12	7	12	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	17	^{a}35.4	− 0.8	69	7	4	19	42^a	4.69	−0.41	1.80	14.0	13	12^a	3^a	15^a	....	Loretto Academy.
Louisville	Jefferson	525	43	34.8	− 3.3	69	7	2	15	36	4.12	+0.39	1.80	9.7	15	10	9	12	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	6	34.6	......	69	7	− 2	16	40	4.64	......	1.56	13.5	13	15	8	8	sw.	Wm. I. Hunt.
St John	Hardin	777	19	32.8	− 1.8	68	7	− 4	19	43	5.39	+0.97	1.60	14.5	13	14	7	10	......	Sisters of Loretto.
Scott	Kenton	900	18	33.0	− 0.2	65	1$^+$	− 1	16	36	4.33	+1.12	1.25	5.6	13	9	9	13	s.	E. B. Wilson.
Shelbyville	Shelby	825	26	30.2	− 5.7	67	7	− 4	16$^+$	42	4.32	+0.66	1.45	9.7	12	12	6	13	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	13	33.8	− 1.3	67	7	− 9	16	48	4.50	+0.08	0.80	14.2	15	12	9	10	s.	E. D. Bourne.
Williamstown	Grant	943	13	32.2	− 0.7	68	7	− 2	16	33	4.12	+0.52	1.83	9.0	10	8	10	13	.....	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	11	33.0	− 1.6	75	8	12	19	48	4.94	+0.27	1.30	13.4	10	9	7	15	sw.	A. H. Bowman.
Berea	Madison	1070	14	35.4	− 0.3	70	7	1	19	37	3.87	−0.72	0.65	14.7	14	15	2	14	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	27	.....	.....	.....	.....	.....	.....	.....	4.52	+1.38	0.88	10.0	10	.....	.....	.....	.....	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	26	.....	.....	.....	.....	.....	.....	.....	3.67	+0.56	1.60	14.0	9	8	7	16	s.	J. V. Oldham.
Farmers	Rowan	668	9	.....	.....	64	27^1	−14	19	48^1	4.13	+0.53	1.50	......	8	.....	.....	.....	.....	Durwood Cassity.
Hazard	Perry	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Jackson	Breathitt	776	4	.....	.....	.....	.....	.....	.....	.....	4.89	....	1.90	11.2	9	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	1	.....	.....	.....	.....	.....	.....	.....	3.92	....	1.54	7.5	13	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	11	.....	.....	.....	.....	.....	.....	.....	2.49	−0.37	0.72	....	7	.....	.....	.....	.....	F. C. Sammons
Manchester	Clay	1400	4	.....	.....	.....	.....	.....	.....	.....	2.68	.....	0.82	10.0	8	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	18	31.8	− 2.0	71	4	− 7	19	46	3.68	+0.08	1.18	11.5	10	14	6	11	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	37.2	− 0.7	69	5	12	19	43	5.47	+1.32	1.96	9.0	12	16	12	3	......	B. H. Perkins.
Mount Sterling	Montgomery	930	25	^{a}32.7	− 2.7	67^a	4$^+$	− 6^a	19	43	3.46	−0.49	0.90	6.2	8	10^a	11a	9^a	w.	W. R. McKee.
Pikeville	Pike	634	9	.....	.....	.....	.....	.....	.....	.....	3.24	−1.02	1.24	10.0	9	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	23	37.7	+ 0.4	68	7	2	16	39	2.81	−0.85	0.73	8.5	10	12	2	17	s.	J. W. Crooke.
Weeksbury	Floyd	1216	2	42.0	....	70	6	3	19	51	.....	.....	.....	11.1	....	19	0	12	......	O. A. Lund.
Williamsburg	Whitley	939	19	37.0	− 1.3	68	8	−12	19	50	3.94	+0.25	2.48	7.0	10	13	4	14	w.	N. C. Jones.
State averages and extremes		......	..	35.5	.....	74	4$^+$	−14	19	54	4.23	.	2.48	10.1	10	12	7	12	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing: for example, b represents two days, etc.

+ Also on other dates. ++ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky

persons, observed the funnel-shaped cloud which seemed to come out of the southwest corner of the first hailstorm, and about 3 to 3 1-2 miles south of Calhoun where we were. We had an excellent view of it and observed its caprices. It would at times seem to draw up into the cloud and then quickly dart down, repeating this over and over again. When the small tapering and twisting tail of the funnel reached the ground, what appeared like thin blue smoke, much thinner in appearance than the black tail, would rise from the ground and extend itself up about one-fourth of the distance to the main cloud. This phenomenon was repeated every time the tail, which wa always dangling about like the tail cf a flying kite, reached th earth. This blue smoke would vanish quickly. The path th tornado marked on the earth varied between 7 and 300 yards i width, and was several miles in length. Several dwellings, number of tobacco barns filled with tobacco, corn cribs, stables and other outbuildings were destroyed. No lives were lost although there were several narrow escapes. A school hous located on Bates' Knob was completely deftroyed. But fortu nately the storm occurred during a recess period when th

Daily Precipitation for December, 1916.

STATIONS		Day of month																															[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
r Dam	G				.62					.42				T		.38			.63					.10				[illegible]	[illegible]				[illegible]
ville	M				.65				1.67		[illegible]				.26				.07		.23	.30					.79	[illegible]				[illegible]	[illegible]
un	G			T.	.64				1.13	.20		T	T	T.	.10	.18			.10		.56		.32		.03		.40	1.10	.08				4.86
ngton	G					.27			.60	.20					T	.20			.30			.16	T.					[illegible]	[illegible]				[illegible]
ville					.35				.80	.15					.18	.07			.05		.28	.06	.45				[illegible]	1.10	.29				[illegible]
insville	C				.60				.42					T.	.35				.15		.90	.50		1.10				1.05	.26				[illegible]
n	O				.37				1.26			T.			T.	.40					.58		.30		.08		[illegible]	1.39					[illegible]
eld					.12				1.62	.12						.25			.10				.30				.40	[illegible]					4.61
sboro	O					.40			.60	.14			T	T.		.27			.05		.15	.19		.20	.05		.05	1.28					[illegible]
ah	O				.22				1.78	T	.10				.10				.10		.15		.15				.80	[illegible]	[illegible]				[illegible]
ton																																	
llville					.11				.25						.32				.28			.74					1.10	.46					[illegible]
Central Division.																																	
	C			T	.50				T	.02			T	T.	T.	.45			1.40		.85		.20		T		.60	1.85	T.				5.87
orage	O				.88				.39				T.	T.	.17	.06			.06		.17		.51				1.49	.92	.19				5.14
town	S					.78				.23	.02					.40			.10	.10		.50	.90					1.85	.66				[illegible]
ng Green	G					.05				.20						.73			.25	.08		.18	.55					1.05	1.25				[illegible]
ide	C			T.		.25				.26		T				.20			.22	.20	T	.54	.42			T		.62	1.70				4.41
rport	O					.80			.62	.60			.01	T.		.28	T.		.04	T.	.21	.42	.20					1.93	.10				5.21
nton	G				1.35					.10			T.	T.	.10	.40			.50		T.	.38	.06		T.		.16	1.00	.90				4.95
ık	C					.50				.21						.40			.08	.07		.21	.23					.38	1.17				3.25
fort	K					.88			T	.10			.10	T.	T.	.20	T.		.04	.08	T.	.47	.53			.04		[illegible]	.40				4.44
lin	G				.15			T.	.16				T.	T.	.43				.20		.20		.39		.15		.05	1.60	.43				3.76
sburg	G			T.		.16				.34				T.	T.	.39			.05	.13	.01	.24	.43					1.00	.78				[illegible]
Bridge	K					.85				.17				T.	.01	.35	.05			.20		.35	.98					.70	.80	T			4.46
gton	O				.24				.62	.19		T.	T.	T.	.10	.19			.05		.78	T	.42		T.		.52	1.18	.19				[illegible]
ion City	K			T	.29				.10	.12			.05	.05	.20	.40			.35		.45	.25	.28		.25		.05	.70	.74				4.28
nfield	G				.50				.37					.02	.35				.25		.57	*	.50				1.20	.63					4.39
gton ***	K			T.	.80				.07	.02			.01	.01	.19	.03			.16		.39	.28	.31		.01		.42	.63	.29			.01	[illegible]
to	S				.05	.50	.01	T	.03	.10			T.	T.	.05	.20			.40		.30	.20	.80				.25		1.80				[illegible]
ville***	O				.62			.02	.35			.01	T	T.	.24	.01			.08		.45	.24	.14		.01		1.31	.59	.03			.02	4.12
(Cherokee Park)	O				.41	.30		T	.16	.16		T.		T.		.60	T.		.10		.14	.33	.30		.02	T	.36	1.56	.20				4.64
ohn	S			T		1.60		T.	T	.40			T	.02	T	.25			.04	.04	.15	.58	.28		.06		.02	1.55	.40				5.39
	L			T	.63	.65		.02	.05	.18		T.		.01	T	.10			T.		.40	.05	.35		.07		.57	1.25	T.				4.33
yville	S					.95				.17			T	.01	T.	.25			.02	.02	.07	.40	.65			.01		1.45	.32				4.32
rsville	S			T	.37	.75			T	.10		T		.01	.09	.17	.01		.07		.60	.01	.80	.01			.57	.40	.51				[illegible]
nstown	L					.76				.15			.02	.02		.15				.06		.30	.50					1.83	.33				[illegible]
Eastern Division.																																	
yville‖	K					.74				.30			T.	T.	.03	.40			T	.44		.40	.84					.45	1.30	.04			[illegible]
	K				.24				.13	.12			.15	.10	.12	.32			.58		.22	.08	.03				.50	.65	.63				3.87
ttsburg	B					.88				.30			T.	.08		.26	T.			.22		.84	.60	T		T		.42	.80	.12			4.52
outh	L					.31				T.			.18		T.	.16	T		T	.10		.32	.61			.04		1.60	.35				3.67
ers	L			T		1.50				.15				T		.25			.20			.26	.35					.60	.82				4.13
rd	K																																
on	K					.50				.25			T	T	T.	.33			T	.50		.40		.70				.15	1.90	.16			4.89
on‖	C					.69				.10				.03	.06	.30	.02		.20	.09		.24	.21					.32	1.54	.12			3.92
a	B									.30						.06			.10			.43		.20				.72	.68				2.49
hester	K					.27				.10						.32	.10		.20	.30								.57	.82				2.68
ville‖	O					.32			T.	.14			.01	.01	T.	.17	T.			.18		.42	.85			T.		1.18	.40				3.68
lesboro	C				.05	.10			.05	.32					T.	T.	.30	.12	.60			1.13	.25			.05	.54		1.96				5.47
nt Sterling‖	L				T.	.90			T	.35		.05	.02									.20	.52					.70	.72				3.46
ville	B					.22				.26						.26			.08	.32		.18	.46	T					1.24	.22			3.24
mond	K			T		.28				.21			.04	.05	.25	.02			T		.26	.32						.73	.65				2.81
sbury	B					.55							T	T		.20		.06	.50		.30												[illegible]
amsburg	C					.20				.23				T	.05	.20	T		.18	.15		.30	.10					T	2.48	.05			[illegible]

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of rvation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland (T) Tenn- (O) Ohio; (M) Mississippi.

ils were all out on the playground, and they with the teacher ght shelter in a protecting cove in the edge of the bluff, and s escaped. The air over Calhoun and towards the storm to southward was filled with leaves, corn blades and other ris.''

December 22.—During a blinding snowstorm, a residence r Danville, was struck by lightning and completely wrecked. e occupants were severely shocked.

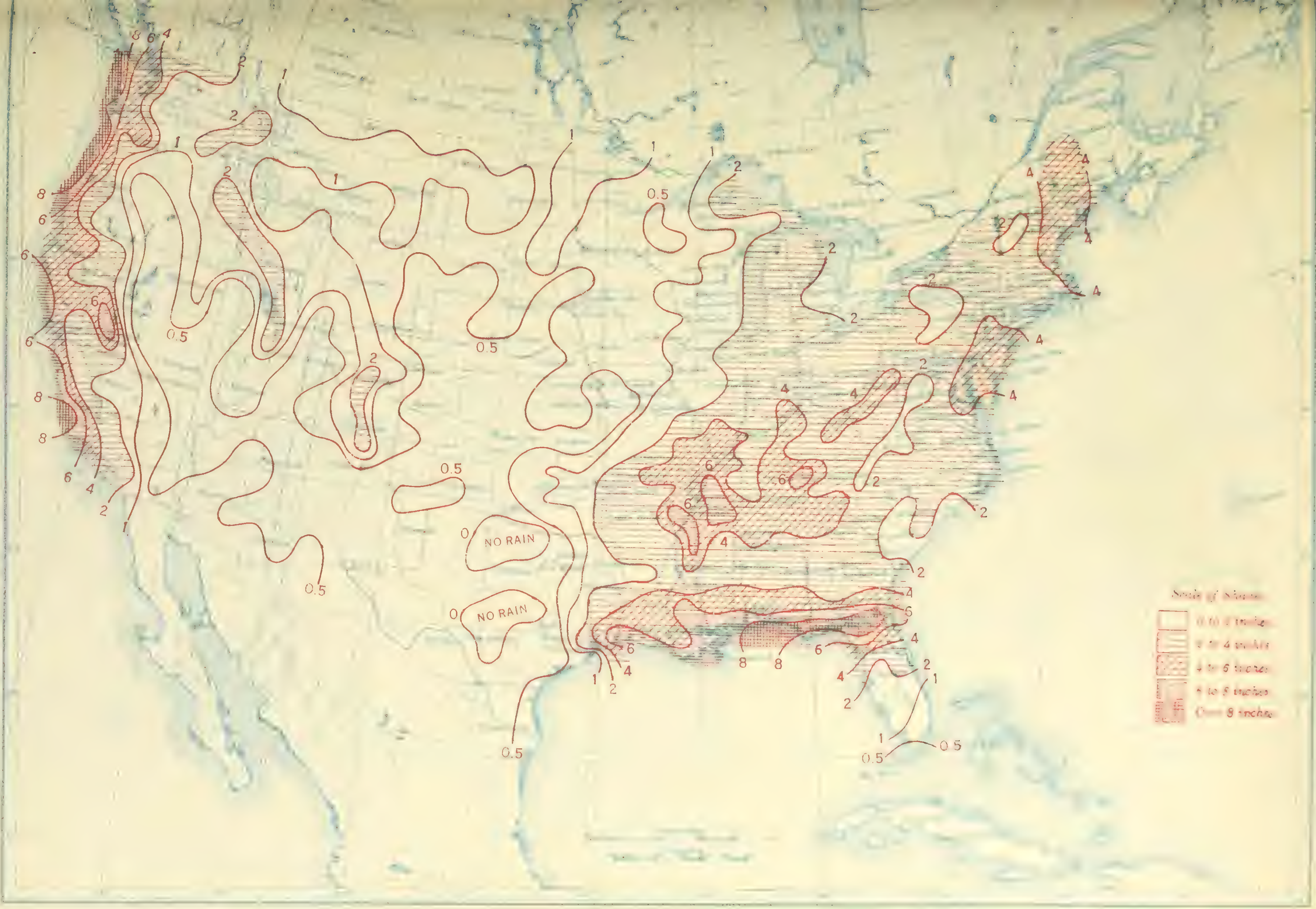
Rivers.—The streams of the State, including the Ohio, were y low during most of the month. Ice began forming in the Ohio on the 14th and by the 16th was interfering with navigation above Louisville. The ice continued running in that section of the river until the 21st, when the river became blocked above the Big Four bridge at Louisville and all navigation was suspended. A moderate rise, due to melting snow, began on the 23d; and on the 26th the gorge broke, causing only slight damage to local shipping. The river rose rapidly, following the rains of the 26-27th, and was clear of ice at most places by the 28th. Good stages prevailed at the end of the month and normal traffic was resumed for the first time in several months.

Daily temperatures for December, 1916.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mea
Western Division																																	
Beaver Dam §§	Maximum	58	60	66	65	59	58	70	62	47	46	46	36	33	28	22	44	40	24	38	40	34	23	38	49	49	56	56	48	39	46	45	45.
	Minimum	25	29	47	52	53	25	35	56	25	18	33	26	21	12	0	2	24	22	5	31	21	8	8	28	21	35	53	38	24	29	18	26.
Blandville	Maximum	60	64	61	72	05	63	72	62	38	44	46	35	34	23	28	47	47	34	40	40	20	23	37	54	49	60	60	43	38	41	48	46.
	Minimum	34	34	51	58	45	37	55	30	24	24	32	25	16	16	−2	12	23	19	18	16	13	3	16	53	29	43	43	28	24	23	24	27.
Calhoun	Maximum	61	62	59	66	61	59	71	66	40	45	46	35	32	24	24	46	46	38	44	38	31	25	36	52	48	55	56	49	40	39	45	46.
	Minimum	30	27	46	57	47	27	44	39	23	19	35	25	16	12	−4	0	26	20	12	30	17	2	10	25	25	33	48	29	22	20	18	25.
Earlington §§	Maximum	62	67	64	71	60	63	73	62	41	47	46	36	20	23	24	47	46	27	41	41	22	26	49	54	53	58	54	43	41	42	50	46.
	Minimum	28	29	32	58	51	25	29	57	25	18	52	27	19	13	−5	4	19	22	10	28	18	2	4	25	26	52	51	31	24	22	19	25.
Greenville	Maximum	59	65	66	67	65	59	70	65	49	45	46	36	34	23	24	47	46	33	39	41	33	23	36	52	46	60	57	49	38	40	47	47.
	Minimum	28	30	47	53	48	24	48	40	22	17	36	26	18	12	−2	0	23	17	8	32	18	1	5	25	26	35	47	31	24	21	18	25.
Hopkinsville	Maximum	61	66	65	69	66	61	70	67	56	52	46	44	38	33	32	47	46	42	41	40	35	28	36	53	50	59	59	53	49	45	49	50.
	Minimum	26	29	49	50	50	29	50	42	27	20	37	26	20	16	5	4	23	23	4	32	19	22	23	25	28	40	50	32	25	32	22	28.
Marion	Maximum	59	63	62	69	68	59	72	72	54	45	42	35	33	30	24	34	44	53	40	39	24	24	35	52	48	57	58	47	47	39	47	46.
	Minimum	32	34	34	35	49	35	36	54	30	22	34	23	13	13	−3	17	28	15	15	20	14	0	13	23	26	35	45	27	23	20	18	25.
Mayfield §§	Maximum	60	65	63	72	63	64	72	59	40	47	43	36	29	22	28	45	43	32	42	43	21	27	43	53	57	59	57	42	39	45	51	47.
	Minimum	38	31	32	51	47	31	34	56	24	20	29	26	20	11	−5	5	18	25	13	25	12	−3	7	26	30	35	50	30	25	22	23	25.
Owensboro §§	Maximum	64	61	65	66	60	58	71	58	44	54	47	35	21	24	43	44	45	32	35	52	28	36	40	56	57	57	51	54	45	42	51	47.
	Minimum	30	27	42	57	48	28	38	55	25	22	34	25	17	14	−11	1	23	18	10	32	18	5	11	55	40	45	48	31	24	23	21	26.
Paducah (Lone Oak)	Maximum	63	65	61	74	70	61	73	68	48	45	43	39	36	25	27	46	47	40	40	42	20	28	37	52	51	60	62	50	46	42	48	48.
	Minimum	37	36	33	34	49	35	48	35	25	24	36	25	15	16	0	12	30	23	19	18	12	1	13	32	29	39	46	30	25	23	23	26.
Russellville §§	Maximum	64	65	62	63	68	69	60	45	48	48	37	28	22	24	44	42	24	38	38	22	25	38	49	52	58	55	44	39	44	48	49	45.
	Minimum	28	34	54	50	24	28	54	23	16	28	22	16	10	2	0	23	23	4	11	18	8	8	23	24	25	35	35	25	22	20	28	23
Central Division																																	
Alpha	Maximum	52	63	64	59	74	62	69	71	58	50	55	45	28	24	24	43	47	29	35	42	40	36	42	50	51	59	60	55	46	49	50	49.
	Minimum	27	44	54	58	60	29	54	58	30	19	45	28	24	15	16	15	29	22	9	38	36	21	19	42	25	53	55	43	26	22	19	33.
Anchorage	Maximum	54	59	65	64	62	58	69	61	40	41	47	34	29	25	20	40	38	25	31	37	35	25	34	45	41	49	54	44	36	34	42	43.
	Minimum	29	22	34	52	35	21	41	50	23	14	32	21	11	6	−3	9	11	10	−5	23	23	9	11	23	16	31	44	27	17	18	14	20.
Bardstown §§	Maximum	58	62	62	64	62	63	70	63	40	43	50	33	23	21	20	42	42	25	37	39	31	28	40	47	45	59	58	45	41	37	47	45.
	Minimum	35	29	29	53	53	27	28	50	28	18	33	26	19	11	4	0	20	20	0	13	29	18	9	10	24	25	37	34	23	20	18	24.
Bowling Green §§	Maximum	64	65	65	66	66	69	70	62	42	42	43	37	26	24	24	42	42	27	40	42	23	23	40	52	56	60	56	45	44	47	55	47
	Minimum	30	27	46	58	53	53	49	39	26	19	24	27	21	13	4	6	16	27	3	10	23	13	3	23	25	26	50	35	25	22	19	26.
Edmonton	Maximum	62	62	66	65	65	57	69	67	65	66	54	41	37	22	22	43	42	35	33	40	40	33	36	52	50	62	61	61	41	47	48	49.
	Minimum	19	29	39	36	54	24	36	33	25	16	30	26	20	10	8	−3	15	19	−6	28	30	14	5	26	28	40	52	30	24	21	18	24
Eubank §§	Maximum	53	61	65	64	65	56	66	63	56	59	53	42	34	26	26	41	42	27	35	39	36	23	40	49	47	60	57	46	40	44	46	47.
	Minimum	20	22	33	44	54	24	24	43	27	16	17	26	24	6	12	4	9	19	−4	5	35	19	7	15	27	27	38	36	21	20	18	22.
Frankfort	Maximum	55	56	66	65	63	54	67	65	60	40	51	43	32	27	24	37	40	33	32	40	38	29	35	45	45	50	58	56	37	35	39	45.
	Minimum	25	25	31	56	49	26	33	52	27	17	32	25	16	8	6	2	22	17	−5	22	26	19	10	22	20	30	44	30	22	20	15	23.
Franklin	Maximum	56	60	63	62	63	57	67	62	38	44	50	38	31	25	25	39	39	38	35	40	34	30	37	49	48	59	60	48	39	43	45	45.
	Minimum	31	38	46	55	43	36	45	34	25	19	35	24	16	15	6	7	24	18	17	30	21	12	9	17	27	37	46	31	24	23	20	26.
Greensburg §§	Maximum	58	60	68	64	66	57	70	64	41	45	54	35	26	23	23	43	43	21	39	41	23	23	40	52	49	65	60	42	40	44	47	46.
	Minimum	20	22	26	51	55	24	25	50	29	15	19	27	25	9	7	−3	7	19	−7	4	32	16	8	9	23	24	44	38	24	20	15	21.
Irvington	Maximum	59	56	64	64	62	57	68	62	45	41	47	36	32	27	21	42	37	30	34	39	38	24	35	47	43	56	57	47	36	35	44	44.
	Minimum	30	29	47	57	48	27	44	45	26	21	35	26	17	12	2	6	26	17	7	30	22	12	11	30	25	33	47	32	23	22	19	26.
Junction City	Maximum	56	59	66	62	65	56	68	65	57	40	54	41	31	24	23	41	43	34	32	39	39	32	37	48	48	61	60	58	49	38	45	47.
	Minimum	23	28	30	53	49	22	30	51	26	15	29	24	12	3	9	−2	28	15	−10	27	30	17	8	26	24	34	50	52	20	18	15	23
Leitchfield	Maximum	57	60	64	63	63	57	69	63	45	43	48	38	32	24	22	39	41	33	37	38	36	26	50	42	45	55	56	50	38	41	45	45.
	Minimum	27	24	41	54	48	25	45	42	29	18	33	25	17	9	−3	3	19	17	1	30	21	5	25	22	32	36	48	32	23	20	19	25
Lexington	Maximum	52	55	64	63	62	54	66	65	33	39	50	31	30	24	19	41	36	22	32	41	37	23	32	44	39	57	59	42	35	31	41	42.
	Minimum	32	37	44	54	41	36	42	32	26	27	31	27	13	12	5	2	22	8	7	28	23	12	12	50	26	33	42	26	22	20	22	25
Loretto	Maximum	57	67	66	64	65	56	69	64	60	42	51	41	33	24	22	41	42	32	34	40	38	28	35	..	49	59	60	56	39	37	44	[a]47
	Minimum	23	25	34	55	50	20	32	55	26	13	32	25	16	7	4	1	19	17	−4	28	26	16	9	..	18	31	45	33	21	17	13	[a]23
Louisville	Maximum	57	56	63	64	61	54	69	61	36	41	46	31	30	25	19	43	38	27	34	39	32	25	33	47	40	55	56	41	36	35	40	43
	Minimum	37	35	45	56	45	35	43	27	27	25	31	25	15	14	2	7	27	13	11	32	22	13	13	31	26	34	41	28	24	21	23	26.
Do. (Cherokee Park)	Maximum	56	54	64	65	61	54	69	65	60	40	46	37	30	26	21	38	40	33	33	37	36	25	34	46	49	46	55	52	36	33	40	44.
	Minimum	29	27	41	56	50	25	39	52	26	18	32	25	15	9	−1	−2	27	17	1	29	22	15	10	26	20	29	44	28	20	18	16	24.
St. John §§	Maximum	57	59	64	64	63	55	68	60	39	44	50	32	21	27	19	40	44	24	37	38	28	25	45	43	45	55	57	41	37	36	45	43
	Minimum	24	25	28	51	51	24	26	49	25	18	22	26	19	10	−1	−3	11	16	−4	14	25	9	5	13	21	33	43	32	22	20	18	21.
Scott	Maximum	65	63	63	64	58	55	65	61	61	40	48	38	27	23	20	29	39	27	29	35	34	25	29	42	41	46	54	47	24	28	38	42.
	Minimum	32	27	37	73	45	29	36	52	26	16	29	24	15	3	6	−1	25	16	1	25	23	18	9	18	18	25	39	27	20	16	13	23
Shelbyville §§	Maximum	56	50	66	65	59	57	67	63	28	40	50	30	20	24	12	24	38	25	34	34	20	23	34	45	37	52	56	43	22	32	40	40
	Minimum	29	26	25	47	48	25	25	46	25	16	17	25	18	8	2	−4	8	19	−4	11	20	18	8	12	15	20	35	32	21	18	17	20
Taylorsville	Maximum	56	53	65	65	63	53	67	64	61	40	50	37	28	28	22	39	40	35	35	40	37	27	35	47	44	49	57	53	36	35	40	45.
	Minimum	20	22	29	51	50	23	51	51	27	15	33	24	17	9	1	−9	13	17	−8	13	26	17	1	21	13	31	47	33	21	21	14	22.
Williamstown §§	Maximum	56	59	65	64	57	59	68	63	38	44	50	29	21	28	16	28	37	21	33	35	29	27	32	43	43	45	54	43	46	30	42	42
	Minimum	32	31	37	49	51	32	33	40	25	20	31	25	20	6	3	2	4	17	2	5	29	17	11	13	19	52	33	30	19	16	13	22
Eastern Division																																	
Beattyville §§	Maximum	58	63	69	68	71	63	72	75	42	45	56	33	32	23	23	39	44	25	35	40	41	32	45	51	50	61	63	38	47	41	42	48.
	Minimum	19	20	24	31	14	23	23	30	30	14	12	30	24	10	12	−6	−1	15	−12	8	26	24	9	10	23	25	33	32	20	12	13	18.
Berea	Maximum	56	65	58	67	67	62	70	67	59	41	57	43	32	26	24	40	43	26	34	40	39	34	40	50	52	65	65	56	40	38	50	48
	Minimum	28	32	34	50	50	25	38	46	29	15	29	25	12	4	11	4	24	15	−1	8	24	18	8	20	25	35	50	31	21	19	17	24
Farmers	Maximum	.	.	..	.	..	..	..	.	..	.	.	..	33	28	27	36	43	33	34	41	43	38	40	49	69	53	64	69	40	35	45	[l]43.
	Minimum		.	.	..	..	.	..	.	..	..	..	.	22	2	11	−6	24	14	−14	24	32	19	8	21	21	29	43	31	17	13	10	[l]16.
Maysville §§	Maximum	55	56	66	71	61	57	68	68	39	42	54	32	29	28	20	40	38	24	38	38	38	30	38	42	43	54	58	42	36	32	42	44.
	Minimum	24	23	24	37	50	25	24	32	27	15	22	26	21	6	11	−6	3	18	−7	14	22	17	6	8	18	18	33	32	20	15	13	19.
Middlesboro	Maximum	53	58	64	61	69	62	62	62	60	48	53	57	35	27	30	34	46	37	31	34	46	45	41	45	52	56	57	60	47	46	48	49
	Minimum	21	23	27	51	56	24	27	37	30	15	29	25	22	10	21	4	24	20	−12	8	33	25	16	28	25	29	46	44	29	22	18	25
Mount Sterling §§	Maximum	53	56	65	67	61	54	67	66	36	41	53	30	24	25	20	39	..	20	37	40	37	27	33	42	42	58	60	41	36	32	41	43
	Minimum	27	28	32	48	52	24	28	43	26	16	25	26	22	6	7	−2	4	..	−6	6	34	17	7	20	23	28	35	29	20	18	16	22.
Richmond §§	Maximum	55	59	66	66	63	59	68	66	38	43	55	43	33	29	20	41	24	37	58	50	30	40	45	50	48	63	61	58	40	35	38	47.
	Minimum	31	31	37	52	55	32	43	53	27	19	37	26	24	10	11	2	22	3	25	33	18	12	30	32	25	30	43	32	22	20	18	27
Weeksbury	Maximum	56	62	69	69	69	70	70	70	66	54	61	56	38	35	31	39	47	40	32	44	42	46	51	55	59	63	66	57	52	60	65	54.
	Minimum	29	32	31	39	51	43	29	42	38	29	20	27	18	20	21	5	23	20	3	15	19	20	25	29	33	38	51	42	40	43	38	29.
Williamsburg §§	Maximum	60	62	65	65	63	64	65	68	50	49	55	45	39	34	26	40	45	35	35	42	45	42	45	49	53	57	54	56	61	60	58	51.
	Minimum	22	37	35	30	52	23	23	45	22	11	30	30	22	10	10	2	9	23	−12	8	34	24	16	16	20	38	28	24	18	32	38	22

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
NO RAIN
0.5
1
2
4
6
8

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CLIMATOLOGICAL DATA

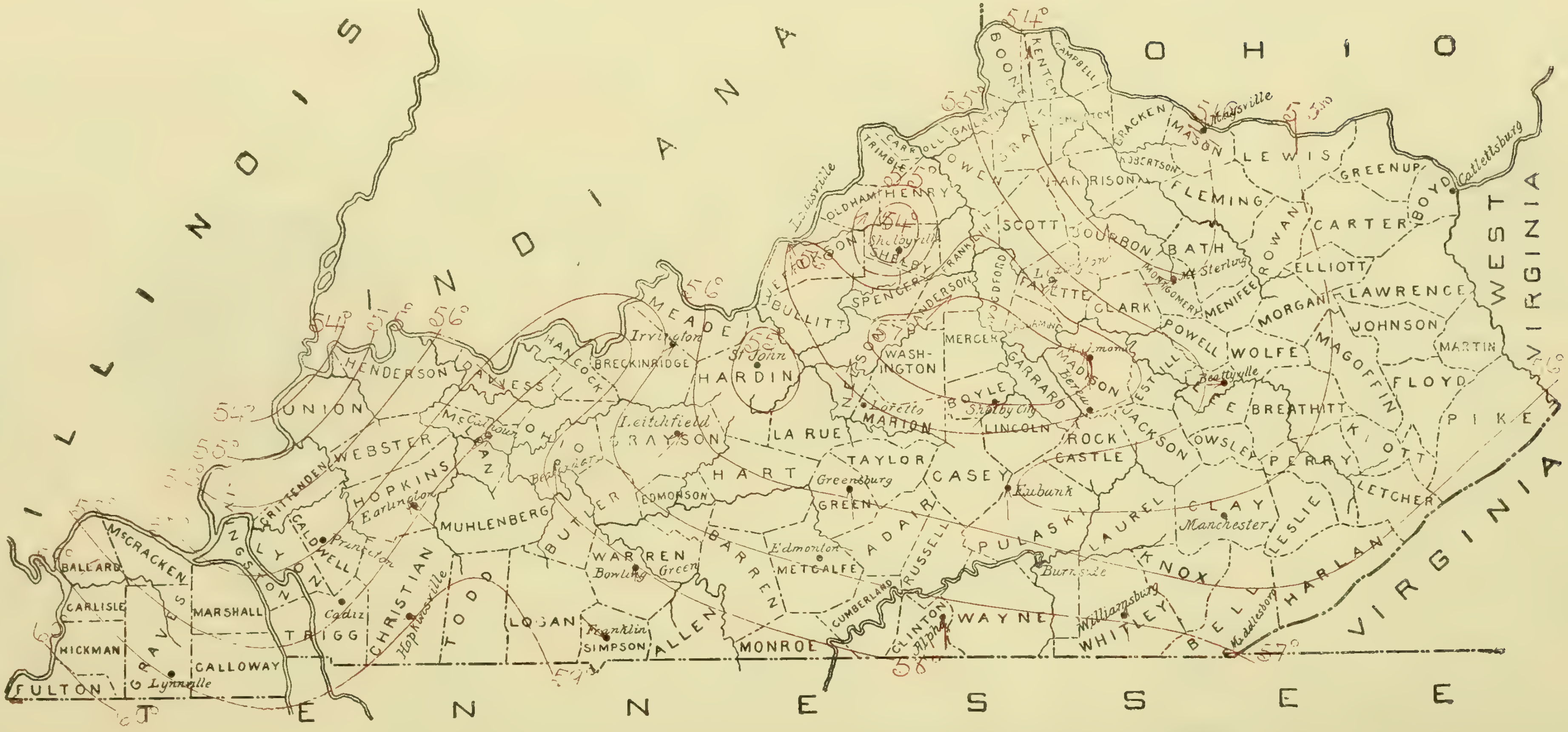
KENTUCKY SECTION

ANNUAL, 1916

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 7, 1917

ANNUAL MEAN TEMPERATURE AND PREVAILING WIND DIRECTION, 1916



Lines pass through points of equal temperature. Arrows fly with the wind.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XXI. LOUISVILLE, KY., ANNUAL, 1916. No. 13.

GENERAL SUMMARY

The year 1916 proved unfavorable for practically all the staple
ops of the State, except tobacco and hemp; also it was an
nusually bad year for all garden truck. The weather condi-
ons which brought about such general adversity to crops were:
) the large deficiency in precipitation during the months of
ebruary, March, April, and much of May, but particularly
pril; (2) the five weeks of wet weather, which began about May
) and continued through to June 23, causing continuously wet
il; (3) the many local storms of more or less heavy rains and
cal damage during July; (4) the very irregular distribution of
in in August, and (5) the unseasonably cool weather which so
rgely prevailed throughout the months from March to June
clusive—particularly unfavorable being the many unseasona-
ly cool nights of May and June.

Other noteworthy features of the year were the unusually
rge number of winter thunderstorms in January and Decem-
er; the remarkably long periods of fine bright weather during
eptember, October and November, although the lack of rains
nd deficient moisture of October and November hindered plow-
g and the germination and growth of fall planted grain; and,
e heavy snowfall of December.

The last killing frost in spring occurred over the State in the
eriod, April 9-11th. The date of first killing frosts in the fall
nged for the various parts of the State from October 1st to
2d, the latter being the more general date. No damage of
nsequence resulted from frost either in the spring or fall.

THE WEATHER BY MONTHS.

JANUARY.—Noteworthy features of January weather were:
e large number of warm days; sudden changes in tempera-
re; thunderstorms, and heavy precipitation. Typical warm
eather thunderstorms, accompanied by hail in many places,
ccurred generally over the State on the 12th, followed by an
brupt fall in temperature of 60° or more, and registering zero
r lower by the 17th. Thunderstorms, attended by heavy rain-
ll, and hail in some places, also occurred on the 29th in the
ntral and western counties. The average precipitation for the
tate has been exceeded only three times in January during the
ast 28 years. Serious floods occurred along the lower Ohio,
wer Green, and the Mississippi rivers.

FEBRUARY.—The temperature averaged near normal with no
arked extremes in either direction. Zero temperatures were
ecorded at only a few stations. Springlike conditions prevailed
om the 20th to 22d, inclusive. Buds on peach trees were beginning to open, and some spring plants had made their appearance by the 22d.

MARCH.—March weather was generally disagreeable with high winds on many days and numerous and decided changes in temperature. Frequent hard freezes were injurious to wheat in the western part of the State, where precipitation was light. The precipitation for the month as a whole was considerably below normal.

APRIL.—April weather was cool, cloudy, windy, and generally unfavorable for the growth of vegetation. Minimum temperatures were unseasonably low on most days. Killing frosts occurred over part of the State as late as the 18th. Precipitation averaged considerably below normal. Tobacco plants were late in coming up, gardens made but little progress, and corn planting had scarcely begun at the end of the month. Thunderstorms on the 20th were accompanied at many places with destructive winds, lightning and hail.

MAY.—Weather conditions during May were favorable for farm work in the western counties, but in the eastern counties planting and germination of corn were hindered by lack of rain and hard unworkable ground. Also, cool nights during the first two decades, and unseasonably low temperatures near the end of the month, held in check the growth of most crops. Droughty conditions prevailing in the eastern counties were not relieved until the 29th and 30th.

JUNE.—Unseasonably cool weather prevailed during practically the whole month, daily temperatures averaging almost continuously below normal. Rains occurred almost daily during the first three weeks. Thunderstorms were frequent, and in many localities were attended by hail and destructive wind squalls. Rain and wet soil greatly delayed farm work.

JULY.—The month was notable for the persistent high temperature, numerous violent local thunderstorms, and the large number of casualties from lightning. Local storms of great severity occurred nearly every day during a period of two weeks in some part of the State. In spite of these storms, rain was needed over much of the State at the end of the month.

AUGUST.—The weather during the first three weeks of August was sultry and oppressive, with maximum temperatures generally above 90°. While the precipitation for the State as a whole averaged considerably above normal, the distribution was very irregular, many localities having a large excess and others a large deficiency. High temperatures hastened the maturing of tobacco, cutting and housing becoming general during the last decade.

SEPTEMBER.—September weather was marked by the large number of clear, bright days, and the long period of nearly four weeks with only a few light scattered rains. Frosts occurred generally over the State on the 16th, being heavy in some of the central counties, but light in most other sections. Frosts occurred again on the 19th and 30th. These frosts caused but little injury to crops.

OCTOBER.—Exceptionally fine weather prevailed during most of the month, and conditions were especially favorable for farm work. The first general killing frost of the season occurred on the 22d. It came so late there was no damage of consequence.

Fall plowing was interfered with to some extent on account of dryness.

NOVEMBER.—Sharp variations in temperature, marked deficiencies in precipitation, and the large number of bright, clear days, featured the weather for November. The precipitation was considerably less than normal, and fall grain suffered for need of moisture to germinate the seed.

DECEMBER.—December was a month with remarkable variations in temperature and other weather conditions. Warm weather prevailed during the first week, but nearly all the rest of the month was decidedly cold. A remarkable feature of the weather was the frequent occurrence of thunderstorms. A tornado occurred in the lower Green River district on the 4th. Snowfall for the month was unusually heavy for December, and there was snow covering on the ground during most of the cold weather.

MONTHLY SUMMARIES, 1916.

MONTH.	Temperature.				Precipitation.		Average number of days.			
	State average.	*Departure.	Highest.	Lowest.	State average.	*Departure.	With .01 or more rain.	Clear.	Partly cloudy.	Cloudy.
January	41.2	+5.8	78	− 5	7.27	+3.05	14	9	6	16
February	35.0	−0.4	72	− 4	2.99	−0.75	9	11	6	12
March	43.5	−2.8	84	4	3.39	−1.50	10	12	8	11
April	54.0	−1.9	89	23	2.64	−1.43	9	11	8	11
May	67.2	+1.5	98	33	4.02	+0.10	9	14	9	8
June	70.1	−3.8	99	45	4.94	+0.72	11	13	10	7
July	78.6	+1.8	102	52	4.17	−0.18	9	17	9	5
August	77.0	+1.3	101	47	4.25	+0.90	9	14	10	7
September	67.2	−3.4	98	32	3.48	+0.78	6	20	5	5
October	57.6	−0.1	97	24	2.59	+0.31	6	20	5	6
November	47.8	+1.8	83	8	1.52	−2.07	4	20	4	6
December	35.5	−2.0	74	−14	4.23	+0.44	10	12	7	12
Annual means and extremes	56 2	−0.2	102	−14	45.49	+0.37	106	173	87	106

KILLING FROSTS, 1916.

STATIONS.	Last in Spring.	First in Autumn.	STATIONS.	Last in Spring.	First in Autumn.
WESTERN DIVISON					
Beaver Dam	April 10	Oct. 11	Junction City	April 10	Oct. 11
Blandville	do 9	do 21	Leitchfield	do 10	do 22
Calhoun	do 10	do 22	Lexington	do 10	do 22
Earlington	do 10	do 11	Loretto	do 10	do 1
Greenville	....	do 22	Louisville	do 9	do 22
Hopkinsville	do 9	do 21	Cherokee Park	do 10	do 22
Marion	....	do 21	St. John	do 10	do 11
Mayfield	....	do 21	Scott	do 10	do 11
Owensboro	do 10	do 22	Shelbyville	do 10	do 11
Paducah	....	do 21	Taylorsville	do 10	do 11
			Williamstown	do 10	do 22
CENTRAL DIVISON			EASTERN DIVISON		
Alpha	April 9	do 22	Beattyville	April 11	do 22
Anchorage	do 10	do 11	Berea	do 10	do 11
Bardstown	do 10	do 11	Farmers	do 10	do 1
Bowling Green	do 10	do 21	Maysville	do 10	do 22
Edmonton	do 10	....	Middlesboro	do 10	do 22
Eubank	do 11	do 1	Mount Sterling	do 10	do 11
Frankfort	do 10	do 11	Richmond	do 10	do 22
Franklin	do 9	do 22	Weeksbury	do 10	do 22
Greensburg	do 10	do 1	Williamsburg	do 10	do 22
Irvington	do 10	do 22			

COMPARATIVE ANNUAL DATA FOR KENTUCKY.

Year.	Temperature.				Precipitation.	
	Mean.	*Departure	Highest.	Lowest.	Average.	*Departure
1889	55.6	−0.8	101	3	35.97	− 9.15
1890	57.1	+0.7	101	4	58.82	+13.70
1891	56.3	−0.1	105	0	49.69	+ 4.57
1892	55.3	−1.1	101	− 6	44.25	− 0.87
1893	55.5	−0.9	101	−22	44.71	− 0.41
1894	57.1	+0.7	105	−12	34.81	−10.31
1895	55.0	−1.4	104	−18	38.47	− 6.65
1896	57.6	+1.2	106	−12	44.68	− 0.44
1897	57.2	+0.8	107	−16	46.72	+ 1.60
1898	57.2	+0.8	103	−12	52.38	+ 7.26
1899	56.4	0.0	105	−33	46.38	+ 1.26
1900	57.7	+1.3	104	− 9	44.40	− 0.72
1901	55.3	−1.1	112	−22	35.65	− 9.47
1902	56.5	+0.1	107	− 3	44.35	− 0.77
1903	55.8	−0.6	104	−16	41.16	− 3.96
1904	55.3	−1.1	100	− 9	35.10	−10.02
1905	55.8	−0.6	106	−16	47.68	+ 2.56
1906	57.0	+0.6	100	−12	48.84	+ 3.72
1907	56.1	−0.3	102	−11	47.76	+ 2.64
1908	57.7	+1.3	104	2	41.94	− 3.18
1909	56.5	+0.1	104	−14	51.36	+ 6.24
1910	55.3	−1.1	100	−20	50.67	+ 5.55
1911	58.0	+1.6	106	−16	46.77	+ 1.65
1912	54.6	−1.8	100	−20	47.93	+ 2.81
1913	57.9	+1.5	109	− 2	47.46	+ 2.34
1914	56 3	−0.1	109	−16	41.80	− 3.32
1915	56.2	−0.2	102	0	51.92	+ 6.80
1916	56 2	−0.2	102	−14	45.49	+ 0.37

*Compared with 25 years' normal.

Climatological Data for the Year 1916.

Stations	Counties	Elevation, feet	Temperature (degrees Fahrenheit).						Precipitation (inches).											
			Length of record, years	Annual mean	Highest	Date	Lowest	Date	Length of record, years	Total for the year	Greatest monthly	Month	Least monthly	Month	Total snowfall, unmelted	With .01 or more precipitation	Clear	Partly cloudy	Cloudy	Prevailing wind direction
ESTERN DIVISION.																				
ver Dam	Ohio	441	14	57.2	96	June 24†	0	Dec. 15	14	39.50	8.51	Jan.	1.15	Nov.	16.5	74	[illegible]	[illegible]	[illegible]	[illegible]
ndville	Ballard	445	35	58.0	96	July 25†	2	Dec. 15	38	44.81	10.02	Jan.	0.87	July	7.9	98	140	127	99	[illegible]
houn	McLean	437	13	57.8	97	June 30†	−4	Dec. 15	14	46.62	8.32	Jan.	1.26	Nov.	14.7	113	148a	115a	72a	[illegible]
lington	Hopkins	420	26	57.9	101	July 27†	5	Dec. 15	27	37.39	7.28	Jan.	1.09	Nov.	16.7	91	238	[illegible]	111	[illegible]
pkinsville	Christian	524	20	59.0	98	Aug. 20	2	Dec. 15	20	44.03	9.82	Jan.	1.20	Nov.	21.5	87	203	[illegible]	136	[illegible]
rion	Crittenden	571	18		100	July 17	3	Dec. 15	17											
ensboro	Daviess	479	20	56.7	97	July 27†	−11	Dec. 15	20	40.41	9.26	Jan.	0.97	July	13.0	97	165	96	103	[illegible]
ucah	McCracken	341							28	41.27	9.83	Jan.	1.23	Feb.		85				
ENTRAL DIVISION.																				
ha	Clinton	811	23		88	July 6†	2	Jan. 19	23		8.57	July	0.85	Nov.	33.8	85	179	56	131	s.
chorage	Jefferson	700	16	54.6	98	July 27	−9	Dec. 16	16	49.42	8.74	July	1.48	Nov.	34.9	97	211	71	84	[illegible]
rdstown	Nelson	637	20	57.1	102	July 27	−4	Jan. 17	20	45.19	6.63	Jan.	2.00	Nov.	32.3	96	184	66	116	s.
wling Green	Warren	500	26	57.9	99	July 16†	−1	Jan. 17†	27	49.12	8.86	Jan.	1.67	Nov.	20.7	97	202	108	56	s.
rnside	Pulaski	773							24	48.86	7.59	July	1.38	Nov.	10.0	106				
verport	Breckenridge	375							3	50.54	10.01	Jan.	1.32	Nov.	16.7	120				
nonton	Metcalfe	600	24				−6	Dec. 19	24											
bank	Pulaski	1,177	22	55.2	94	Aug. 6	−4	Dec. 19	22	46.35	6.64	July	1.72	Nov.	16.0	100	107c	71c	[illegible]	s.
nkfort	Franklin	560	24	56.3	96	May 28	5	Dec. 19	27	45.04	7.28	June	1.65	Nov.	28.0	119	162	83	121	s.
nklin	Simpson	691	22	57.9	94	July 3	4	Jan. 17	22	47.64	9.48	Jan.	1.35	Nov.	17.0	100	61	228	77	nw.
ensburg	Green	581	24	55.5	98	Aug. 6	−7	Dec. 19	28	46.40	6.46	Jan.	1.95	Nov.	19.2	112	79	149	138	s.
h Bridge	Jessamine	762							14	44.40	6.39	Jan.	1.22	July	20.4	116				
ington	Breckinridge	646	19	56.7	94	July 27†	−2	Dec. 15	19	41.54	8.51	Jan.	1.02	Nov.	17.0	89	199	62	105	sw.
ction City	Boyle	1,087	23	56.4	96	Aug. 18†	−10	Dec. 19	23	49.41	7.90	Jan.	1.68	Nov.	23.5	122	196	83	87	sw.
tchfield	Grayson	635	21	56.1	96	July 16	−3	Dec. 15†	21	41.65	7.11	Jan.	1.30	Aug.	20.0	93	171c	108c	84	sw.
xington	Fayette	989	29	55.2	94	July 27	−4	Jan. 17	29	35.34	5.65	Jan.	1.01	April	35.3	129	158	91	117	sw.
retto	Marion	681	18	55.6	96	July 27	−4	Jan. 17†	18	46.68	8.19	Aug.	1.55	Nov.	21.6	141	144b	78b	142b	
ISVILLE	Jefferson	525	44	56.5	98	July 27	0	Jan. 17	44	50.33	8.16	Jan.	1.17	Nov.	24.0	124	146	89	131	s.
o (Cherokee Park)	Jefferson	534	7	55.3	93	July 27†	−2	Dec. 16	7	55.38	10.04	July	1.40	Nov.	26.8	116	138	136	92	sw.
John	Hardin	777	20	54.9	97	Aug. 4†	−4	Dec. 19	20	46.65	6.18	Jan.	1.96	Nov.	22.9	117	226	34	106	
tt	Kenton	900	19	54.2	98	July 27†	−3	Jan. 17	19	39.90	7.30	Jan.	0.76	July	28.5	126	139	116	111	s.
lbyville	Shelby	825	27	54.3	100	July 27	−4	Dec. 16†	28	44.80	7.41	Jan.	1.78	Oct.	33.2	119	192	48	126	s.
lorsville	Spencer	489	14	54.6	95	July 27	−9	Dec. 16	14	47.84	8.02	Jan.	1.70	Nov.	31.3	120	162	80	124	sw.
lliamstown	Grant	943	14	54.3	99	July 27	5	Jan. 18	14	40.57	6.42	Jan.	1.47	Oct.	34.9	107	155	96	115	
ASTERN DIVISION.																				
ttyville	Lee	650	13	55.4	99	July 30	12	Dec. 19	14	48.19	6.93	Aug.	1.60	Nov.	26.7	122	168	107	91	w.
ea	Madison	1,070	15		96	July 1	2	Jan. 17	15	43.98	8.20	Jan.	1.75	Oct.	30.6	95	237	33	96	sw.
lettsburg	Boyd	534							28	46.27	6.88	Aug.	1.56	Nov.	30.0	136				
mouth	Pendleton	600							28	43.30	7.44	Jan.	1.61	Nov.	28.0	116	148	92	126	
mers	Rowan	668	9		95	July 26†	−14	Dec. 19	10		8.00	June	0.90	Nov.						
zard	Perry																			
kson	Breathitt	776							5				1.33	Nov.						
ndon	Laurel	1190							2	42.29	6.14	Jan.	1.59	Nov.		127				
uisa	Lawrence	584							13	39.46	5.76	Aug.	1.12	Nov.		97				
nchester	Clay	1400							7	43.80	6.83	Aug.	1.26	Nov.	25.9	97				
ysville	Mason	524	19	53.8	100	July 27	7	Dec. 19	19	46.78	8.47	Jan.	0.69	July	31.2	135	179	79	108	se.
ddlesboro	Bell	1,128	20	56.8	91	June 30	−12	Dec. 19	20	48.15	6.27	Jan.	1.69	Nov.		125	212	119	35	
unt Sterling	Montgomery	930	27	54.0	95	July 27	−6	Dec. 19	27	52.00	8.99	June	1.79	April		124	180a	53a	132a	w.
eville	Pike	634							11	44.87	5.96	Aug.	1.62	Nov.	26.0	115				
hmond	Madison	926	22	57.0	95	July 24	1	Jan. 17	24	44.08	5.91	Jan.	1.29	Nov.	29.2	118	186	62	118	s.
eksbury	Floyd	1,216	3		94	July 27†	−3	Dec. 19	3	38.10	4.26	Jan.	1.15	Nov.	36.8	79	243	20	103	
lliamsburg	Whitley	939	19	57.0	96	June 26	−12	Dec. 19	21	43.93	6.76	Jan.	1.58	Nov.	18.7	116	173	63	130	

All temperature data are taken from self-registering thermometers.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents 2 days, etc

† Also on other dates

Monthly and Annual Precipitation for the Year 1916, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
WESTERN DIVISION.																										
Beaver Dam	8.51	+4.07	2.83	-0.99	2.44	-1.90	2.29	-2.33	4.41	+0.54	3.32	-0.21	4.06	-0.99	1.60	-1.78	2.74	+0.13	2.46	+0.31	1.15	-1.97	3.69	-0.03	39.50	-5.
Blandville	10.02	+5.61	1.74	-3.02	2.94	-1.93	2.91	-1.28	5.11	+0.58	8.37	+3.54	0.87	-3.02	2.00	-1.02	2.46	-0.52	2.04	-0.69	1.84	-2.62	4.51	+0.56	44.81	-3.
Calhoun	8.32	+3.42	2.49	-1.33	3.00	-1.62	4.70	-0.14	4.17	+0.80	5.34	+1.82	3.58	-1.84	3.21	+0.06	2.72	+0.14	2.97	-0.25	1.26	-1.94	4.86	+1.00	46.62	+0.
Earlington	7.28	+3.15	1.97	-2.03	2.28	-3.23	4.40	+0.08	3.52	-1.49	3.59	0.06	3.99	-0.31	1.33	-1.99	2.14	-0.91	2.22	-0.02	1.09	-3.29	3.58	-0.28	37.39	-10.
Greenville	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	2.88	......	2.55	......	1.08	......	4.23	......	......	......
Hopkinsville	9.82	+4.69	1.53	-2.36	3.30	-1.54	1.99	-2.36	3.94	-0.29	4.47	+0.19	3.42	-0.61	2.20	-0.85	4.22	+1.19	2.31	-0.56	1.20	-2.95	5.63	+0.86	44.03	-4.
Marion	7.75	+2.95	......	......	......	......	......	......	4.02	-0.27	6.05	+2.40	4.07	+0.14	5.90	+3.11	2.58	-0.46	2.29	-0.25	1.71	-2.38	5.03	+1.15	......	......
Mayfield	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	5.15	......	2.35	......	1.95	......	4.61	......	......	......
Owensboro	9.26	+4.75	1.60	-1.89	2.35	-2.43	3.82	-0.28	3.89	+0.05	4.89	+1.32	0.97	-2.88	2.28	-1.31	3.40	+0.58	3.49	+0.39	1.08	-2.37	3.38	-0.48	40.41	-4.
Paducah	9.83	+5.57	1.23	-2.47	2.68	-2.02	2.57	-1.48	5.30	+1.33	6.42	+1.51	2.36	-1.58	2.55	-0.41	2.19	-0.80	2.34	-0.08	1.94	-2.40	4.86	+1.02	44.27	-1
Princeton	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	7.80	......	1.29	-1.05	1.30	-1.93	......	......	......	......
Russellville	......	......	......	......	......	......	......	......	......	......	......	......	......	......	0.78	......	......	......	2.25	......	1.83	......	3.26	......	......	......
CENTRAL DIVISION.																										
Alpha	7.16	+2.31	3.05	-1.45	3.53	-2.64	2.43	-2.84	5.15	+1.27	5.60	+0.56	8.57	+2.87	7.03	+2.70	......	......	2.60	+0.17	0.85	-2.88	5.87	+1.13	......	......
Anchorage	8.32	+4.66	2.43	-0.71	4.19	+0.21	2.92	-1.06	2.92	-0.81	4.76	+1.11	8.74	+4.24	4.12	+0.54	2.88	+0.07	1.52	-1.34	1.48	-1.49	5.14	+1.14	49.42	+6.
Bardstown	6.63	+1.80	4.07	+0.16	3.63	-1.39	2.23	-1.64	3.61	+0.08	5.21	+0.87	2.50	1.98	5.70	+2.09	2.07	-0.83	2.80	+0.40	2.00	-1.38	4.74	+0.38	45.19	-1.
Bowling Green	8.86	+4.35	3.60	-0.55	2.83	-2.30	2.43	-1.34	5.42	+1.34	3.55	-0.16	4.15	-0.19	2.68	-0.84	7.42	+4.29	2.17	-0.20	1.67	-1.94	4.34	+0.02	49.12	+2.
Burnside	6.52	+2.77	2.99	-1.27	3.08	-2.19	2.46	-1.49	3.48	-0.59	3.36	1.02	7.59	+2.66	4.42	+0.31	5.81	+2.55	3.36	+1.06	1.38	-2.29	4.41	+0.36	48.86	+0.
Cloverport	10.01	......	2.41	......	2.50	......	4.54	......	3.97	......	7.53	......	3.54	......	4.69	......	2.61	......	2.64	......	1.32	......	5.21	......	50.54	......
Edmonton	8.20	+4.15	1.87	-2.54	2.66	-3.17	1.46	-2.64	6.30	+1.88	40.9	-0.18	......	......	......	......	......	......	......	......	......	......	4.95	+0.68	......	......
Eubank	5.69	+1.72	3.66	-0.43	4.16	-1.09	2.19	-1.86	4.28	+0.33	4.21	+0.13	6.64	+2.01	2.67	-1.28	2.89	-0.63	4.99	+2.85	1.72	-1.31	3.25	-0.17	46.35	+0.
Frankfort	6.34	+2.72	3.73	+0.17	3.03	-2.24	1.81	-1.36	3.50	-0.32	7.28	+3.16	1.65	-2.32	4.51	+1.09	4.85	+2.01	2.15	+0.20	1.75	-1.66	4.44	+1.08	45.04	+2
Franklin	9.48	+5.88	2.45	-2.44	3.23	-1.52	2.50	-2.11	7.15	+3.10	3.18	-0.79	4.25	+0.14	3.49	+0.19	4.38	+1.02	2.42	+0.32	1.35	-2.18	3.76	-0.52	47.64	+1,
Greensburg	6.46	+2.43	4.08	-0.05	3.84	-1.66	2.74	-0.92	4.59	+0.67	3.37	-1.16	3.76	-0.93	4.96	+1.32	3.68	+0.71	3.44	+1.12	1.95	-1.73	3.53	-0.52	46.40	-0
High Bridge	6.39	+3.07	3.71	+0.03	3.22	-1.14	2.14	-2.11	2.58	-1.24	4.60	+0.61	3.58	-0.94	6.16	+2.81	4.13	+1.25	2.21	-0.26	1.22	-1.49	4.46	+0.07	44.40	+0.
Irvington	8.51	+4.82	1.88	-1.63	1.80	-3.10	3.30	-1.01	2.71	-0.90	5.29	+1.17	4.46	+0.91	2.25	-1.12	2.61	-0.38	3.23	+0.55	1.02	-2.19	4.48	+0.58	41.54	-2,
Junction City	7.90	+3.48	3.83	+0.20	4.40	-0.71	2.34	-1.37	4.56	+0.81	3.69	-0.13	6.94	+2.71	2.96	-0.17	3.35	+0.33	3.48	+1.49	1.68	-1.46	4.28	+0.05	49.41	+5.
Leitchfield	7.11	+2.59	2.40	1.38	2.33	-2.46	2.96	-1.12	6.57	+2.57	4.69	+0.70	3.40	-0.74	1.30	-2.37	2.94	-0.70	2.22	-0.21	1.34	-2.59	4.39	-0.23	41.65	-5
Lexington	5.65	+1.82	3.40	+0.06	3.30	-1.42	1.01	-2.33	2.92	-0.60	5.33	+1.34	1.72	-2.72	2.34	-1.23	2.75	+0.33	2.04	-0.18	1.25	-2.23	3.63	+0.31	35.34	-6
Loretto	7.68	+3.59	1.73	-1.46	2.98	-1.64	2.26	-1.45	3.45	-0.33	4.96	+0.48	3.53	-0.67	8.19	+4.53	2.82	+0.05	2.84	+0.40	1.55	-1.41	4.69	-0.41	46.68	+2
LOUISVILLE	8.16	+4.26	3.14	-0.70	3.85	-0.47	3.17	-0.90	3.39	-0.25	6.05	+1.82	8.08	+4.34	3.06	-0.45	4.12	+1.49	2.02	-0.61	1.17	-3.01	4.12	+0.39	50.33	+5
Do (Cherokee Park)	8.80	......	3.30	......	3.18	......	3.40	......	3.93	......	5.93	......	10.04	......	4.02	......	4.68	......	2.06	......	1.40	......	4.64	......	55.38	......
St. John	6.18	+1.61	3.77	0.21	2.91	-2.08	3.47	-0.40	3.68	-0.30	6.02	+2.02	3.79	+0.24	4.41	+0.78	3.08	-0.04	1.99	-0.50	1.96	-1.52	5.39	+0.97	46.65	+0
Scott	7.30	+3.82	2.49	-0.38	3.74	-0.77	2.42	-0.81	3.85	-0.26	4.42	+0.74	0.76	-2.85	4.63	+1.09	1.62	-0.93	2.09	-0.25	2.25	-0.55	4.33	+1.12	39.90	-
Shelbyville	7.41	+3.44	3.59	-0.01	3.47	-1.44	2.11	-0.92	4.70	+0.69	5.53	+0.83	3.52	-0.68	3.32	+0.29	3.11	+0.22	1.78	-0.35	1.94	-2.01	4.32	+0.66	44.80	+0
Taylorsville	8.02	+4.35	3.02	-1.10	3.01	-1.55	2.14	-3.09	3.58	+0.11	4.85	+0.32	6.80	+2.16	4.22	+0.50	4.25	+0.80	1.75	-0.80	1.70	-1.40	4.50	+0.08	47.84	+0
Williamstown	6.42	+3.33	3.42	+0.14	3.78	-0.56	1.66	-1.78	3.15	-0.11	4.28	+0.55	2.37	-1.69	4.89	+0.75	2.90	+0.19	1.47	-1.41	2.11	-0.23	4.12	+0.52	40.57	-
EASTERN DIVISION.																										
Beattyville	5.09	+1.08	3.37	-1.07	5.01	-0.05	2.25	-2.77	4.58	+0.40	4.17	-0.71	2.91	-2.49	6.93	+2.16	3.70	+0.82	3.64	-0.48	1.60	-1.15	4.94	+0.27	48.19	-2
Berea	8.20	+3.67	2.20	-0.97	2.45	-2.48	3.45	-0.16	4.45	+0.47	3.81	-1.07	6.15	+1.24	1.92	-3.02	3.82	+1.16	1.75	-1.32	1.91	-0.99	3.87	-0.72	43.98	-4
Catlettsburg	5.36	+1.46	4.90	+1.00	4.59	+1.02	2.82	-1.83	3.86	+0.40	4.20	+0.04	1.90	-2.78	6.88	+2.78	3.16	-0.49	2.52	+0.05	1.56	-0.89	4.52	+1.38	46.27	+2
Falmouth	7.44	+4.17	3.38	+0.14	4.32	-0.04	2.26	-0.97	3.80	+0.22	4.84	+0.62	1.62	-1.29	5.08	+1.64	3.61	+1.64	1.67	-0.50	1.61	-2.01	3.67	+0.56	43.30	+3
Farmers	6.99	+3.19	2.90	-0.27	......	......	2.31	-2.19	4.43	+0.37	8.00	+4.01	4.82	-0.48	6.13	+1.31	3.30	+0.21	2.27	-1.03	0.90	-1.83	4.13	+0.53	......	......
Jackson	......	......	......	......	5.19	......	2.35	......	2.68	......	4.08	......	3.83	......	7.83	......	3.84	......	2.80	......	1.33	......	4.89	......	......	......
London	6.14	......	2.10	......	2.31	......	2.29	......	4.14	......	4.26	......	3.33	......	4.89	......	2.99	......	4.33	......	1.59	......	3.92	......	42.29	......
Louisa	4.47	+1.28	3.45	-0.59	4.07	+0.34	2.25	-1.25	3.87	-0.65	4.24	-1.31	2.61	-0.93	5.76	+2.11	2.58	+0.06	2.55	+0.13	......	......	2.49	-0.37	39.46	-
Manchester	6.26	......	1.83	-1.11	2.53	-1.97	2.93	-0.42	2.07	......	4.49	......	6.05	......	6.83	......	2.75	......	4.12	......	1.26	......	2.68	......	43.80	......
Maysville	8.47	+4.52	3.74	+0.29	5.50	+0.86	2.86	-0.57	3.18	-0.87	4.99	+0.21	0.69	-3.85	6.52	+2.54	3.35	+0.72	2.45	+0.18	1.35	-1.49	3.68	+0.08	46.78	+2
Middlesboro	6.27	+2.27	3.83	-1.09	3.22	-2.26	2.54	-2.25	4.45	+0.24	5.04	+0.50	5.39	-0.11	3.37	-0.16	2.93	+0.18	3.95	+1.65	1.69	-1.82	5.47	+1.32	48.15	-1
Mount Sterling	5.91	+1.53	4.22	-0.05	5.00	-0.93	1.79	-1.86	3.89	-0.16	8.99	+4.01	3.90	-1.11	6.08	+2.14	4.29	+1.40	2.37	-0.03	2.10	-1.35	3.46	-0.49	52.00	+3
Pikeville	4.30	+0.51	3.66	+0.15	4.62	+0.41	3.22	-0.68	2.84	+0.08	3.52	-0.79	5.18	+1.43	5.96	+2.44	3.28	+0.44	3.43	+0.99	1.62	-1.25	3.24	-1.02	44.87	+
Richmond	5.91	+1.84	4.31	+0.67	2.88	-1.84	2.22	-1.01	3.50	-0.04	4.75	+0.81	4.75	+0.88	3.73	+0.53	4.53	+1.89	3.40	+1.15	1.29	-1.40	2.81	-0.85	44.08	+
Weeksbury	4.26	......	3.13	......	3.95	......	3.05	......	2.61	......	2.88	......	4.17	......	4.07	......	2.32	......	3.40	......	1.15	......	3.11	......	38.10	......
Williamsburg	6.76	+2.73	3.10	-0.39	2.68	-2.24	2.53	-1.87	4.83	+0.75	4.67	+0.12	4.84	-1.03	4.34	-0.18	2.93	-0.43	1.73	-0.82	1.58	-1.35	3.94	+0.25	43.93	-

The departures from normal precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determin section or division means.

T. Precipitation is less than 0.01 inch rain or melted snow.

Monthly and Annual Mean Temperatures for the Year 1916, with Departures from the Normal.

Stations	January		February		March		April		May		June		July		August		September		October		November		December		[illegible]	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
WESTERN DIVISION																										
aver Dam	41.2	+ 6.4	36.2	+ 1.8	45.2	− 2.3	54.7	− 0.1	68.0	+ 2.0	72.2	− 0.8	80.0	+ 2.8	77.9	+ 1.5	68.4	− 2.8	57.8	+ 0.3	48.0	2.9	36.2	0.2	[illegible]	1.0
andville	40.6	+ 7.2	36.8	+ 0.4	46.7	− 0.4	56.2	− 1.0	69.4	+ 2.9	72.3	− 2.6	80.8	+ 2.9	78.1	+ 1.3	68.6	2.4	59.8	+ 1.7	49.8	+ 3.2	37.0	0.2	[illegible]	+ 1.1
lhoun	ᵃ43.0	+ 6.1	37.2	+ 0.6	45.5	− 4.3	55.6	− 3.3	69.2	+ 1.6	71.4	− 3.7	79.8	+ 2.8	78.0	+ 0.3	69.0	− 3.8	59.4	0.2	49.4	+ 2.0	35.8	2.6	57.[illegible]	[illegible]
rlington	39.6	+ 4.0	35.6	− 0.8	44.6	2.9	55.2	− 2.0	69.6	+ 0.8	72.3	− 3.3	81.8	+ 3.9	79.8	+ 3.2	70.0	− 0.5	60.6	+ 1.6	49.2	+ 1.5	36.2	3.6	57.9	1.4
eenville																	68.7		59.3	......	49.0		36.1			
pkinsville	43.4	+ 5.4	39.2	+ 2.2	48.7	0.5	56.6	0.2	69.4	+ 1.8	71.8	− 3.4	80.0	+ 1.2	78.6	+ 0.8	68.0	3.9	60.4	0.0	52.0	3.7	39.4	1.6	59.0	0.8
arion									68.6	+ 1.5	73.8	− 1.1			78.9	+ 0.8	ᶠ69.4	2.8	60.8	+ 1.7	51.2	2.9	36.0	− 1.1		
ayfield																	67.8		58.6		48.6		36.3			
ensboro	39.8	4.3	35.7	1.1	44.4	2.5	53.5	− 1.7	67.0	+ 0.7	70.4	3.7	80.4	2.4	77.6	1.2	68.2	2.5	58.8	− 0.2	47.2	0.3	37.2	0.6	56.7	0.0
ducah																	71.4	− 2.8	60.8	− 0.6	51.7	+ 2.9	37.6	1.4		
inceton																			ᶠ61.0	+ 2.9	ᵇ52.0	+ 5.5				
ssellville															78.0		68.2		57.8		46.2		34.4			
CENTRAL DIVISION.																										
pha	47.4	+ 7.1	40.2	+ 1.7	47.4	3.3	56.8	− 0.5	68.0	+ 1.4	69.5	− 3.6	75.4	− 0.8	74.8	− 1.3			57.8	− 1.7	51.0	+ 1.5	41.4	+ 1.0	.....	
chorage	39.0	+ 5.4	32.4	+ 0.3	41.2	3.9	52.2	− 1.2	ᵃ66.8	+ 2.4	69.1	− 2.9	79.2	+ 3.1	76.3	+ 1.7	66.2	2.9	55.5	− 1.0	44.8	+ 0.3	32.0	1.9	54.6	0.0
rdstown	41.0	+ 5.1	35.2	+ 0.7	44.0	− 3.6	54.8	− 0.5	69.0	2.0	71.8	− 2.8	81.4	+ 2.9	79.0	+ 1.8	69.8	− 2.1	57.6	− 1.9	47.2	+ 0.2	34.6	− 1.7	57.1	0.1
wling Green	40.8	+ 3.8	35.9	1.3	45.6	− 3.0	55.4	− 2.5	69.8	+ 2.2	73.0	− 2.9	80.6	+ 1.6	79.6	+ 0.7	68.1	− 3.9	59.9	+ 1.0	49.4	+ 2.5	36.7	1.6	57.9	− 0.3
monton	44.2	+ 8.3	38.2	+ 1.8	ᵃ46.0	2.2	ᵇ55.4	− 0.4	ᵇ66.9	+ 1.9	ʲ69.8	− 3.3	.....										37.0	0.6		
bank	43.2	+ 8.3	36.1	2.8	44.4	1.9	53.0	− 0.8	65.6	+ 1.4	68.4	− 2.7	76.3	1.6	75.0	+ 1.2	64.8	− 3.9	55.2	1.5	ᵇ45.6	+ 1.1	34.6	1.1	55.2	0.4
ankfort	42.7	+ 6.5	35.8	+ 1.0	44.2	− 2.0	55.2	+ 0.1	68.8	+ 3.9	70.7	− 2.6	78.8	+ 2.4	77.0	+ 2.3	66.2	2.4	55.4	− 1.1	46.0	− 0.2	34.8	− 2.5	56.3	+ 0.5
anklin	43.2	+ 5.6	38.2	0.4	47.2	2.9	56.8	− 2.3	69.0	+ 2.0	72.4	− 2.5	79.1	+ 1.6	77.8	+ 0.6	67.7	− 4.3	58.8	− 0.5	48.4	− 0.1	36.4	− 3.6	57.9	− 0.6
eensburg	40.2	+ 6.0	34.5	+ 0.8	43.6	− 3.2	54.4	− 0.6	66.8	+ 1.9	70.2	− 3.3	78.8	+ 2.4	77.1	+ 1.5	65.8	− 4.2	55.0	− 1.5	45.6	+ 0.9	34.0	− 2.0	55.5	− 0.1
ington	41.3	+ 5.9	35.8	+ 2.0	44.9	− 2.8	54.6	− 0.5	67.7	+ 1.1	70.5	− 3.1	79.2	+ 2.1	77.2	+ 1.2	67.8	− 2.6	57.6	+ 2.0	48.2	+ 1.5	35.6	− 0.4	56.7	+ 0.5
nction City	42.6	+ 8.0	36.7	+ 3.6	44.2	− 1.9	54.4	0.1	67.4	+ 2.9	69.9	− 1.7	77.8	+ 2.8	76.6	+ 2.3	66.7	− 2.9	57.3	− 0.2	48.0	+ 5.4	35.4	+ 0.1	56.4	+ 1.5
itchfield	41.2	+ 6.1	35.6	+ 1.6	ᵃ43.4	− 2.6	53.8	− 1.6	67.2	+ 1.7	70.2	− 2.7	78.8	+ 2.2	77.0	+ 1.6	67.4	− 2.4	56.7	− 1.4	46.9	+ 0.6	35.5	− 0.3	56.1	+ 0.2
xington	39.7	+ 6.7	32.8	− 2.9	41.2	− 2.2	52.4	− 1.3	67.0	+ 2.7	69.0	− 4.2	78.0	+ 1.4	76.0	+ 1.4	66.7	− 1.2	57.6	+ 1.1	47.4	+ 2.7	34.0	− 2.4	55.2	+ 0.2
retto	41.3	+ 5.1	ᵃ34.6	+ 0.7	43.7	− 4.4	54.0	− 0.9	66.8	+ 1.1	69.4	− 3.4	77.7	+ 1.5	ᵃ76.3	+ 0.6	66.8	− 3.4	ᶜ54.7	− 3.6	ᵇ47.0	+ 0.8	ᵃ35.4	− 0.8	55.6	− 0.6
UISVILLE	40.0	+ 5.7	33.9	− 2.9	43.2	− 2.1	54.0	− 2.2	68.0	+ 1.3	70.6	− 4.4	80.5	+ 1.9	78.2	+ 1.7	68.3	− 1.6	58.3	− 0.1	48.5	+ 2.2	34.8	− 3.3	56.5	− 0.3
Do (Cherokee Park)	40.4	......	33.6	......	43.0	......	54.1	..	66.9	....	68.8	...	77.6	...	75.6	......	66.4	......	55.5	......	47.1	....	34.6	.	55.3	...
John	38.8	+ 4.7	34.4	+ 1.4	41.2	− 3.9	52.6	− 1.8	66.1	+ 1.4	69.8	− 2.5	78.6	+ 2.9	76.8	+ 2.1	66.3	− 2.8	56.0	− 1.6	45.6	+ 0.2	32.8	1.8	54.9	0.2
ott	38.8	+ 6.7	31.0	+ 0.8	40.0	− 4.3	52.3	0.4	65.2	+ 1.0	67.6	− 4.0	78.3	+ 1.6	76.6	+ 1.5	65.4	− 4.1	56.3	− 1.5	46.5	+ 1.5	33.0	− 0.2	54.2	− 0.2
elbyville	37.7	+ 4.0	31.8	− 2.2	40.8	− 4.5	51.9	− 3.0	65.4	+ 0.4	68.9	− 5.0	79.4	+ 2.3	77.4	+ 1.9	66.0	− 3.5	57.0	+ 0.6	45.4	+ 1.5	30.2	5.7	54.3	− 1.1
ylorsville	39.8	+ 6.0	34.0	− 0.2	42.8	− 4.8	52.6	− 1.6	66.4	+ 1.4	69.2	− 3.1	77.4	+ 1.1	75.7	+ 1.3	65.2	− 3.0	54.0	− 2.0	43.8	− 1.1	33.8	− 1.3	54.6	− 0.6
lliamstown	38.0	+ 6.4	31.2	+ 0.2	40.2	− 4.7	51.6	0.0	65.4	+ 2.0	68.0	− 2.6	78.6	+ 3.0	76.6	+ 2.8	65.6	− 2.8	58.4	+ 1.4	46.1	+ 1.0	32.2	0.7	54.3	+ 0.5
EASTERN DIVISION.																										
attyville	40.3	+ 5.8	34.0	+ 0.1	42.2	4.0	53.9	+ 0.5	66.9	+ 2.8	70.0	− 1.8	77.8	+ 2.3	77.3	+ 2.4	66.4	− 3.6	57.0	+ 0.5	45.6	+ 1.9	33.0	− 1.6	ᶜ55.4	+ 0.5
rea	42.0	+ 4.7	35.6	− 0.2	42.4	− 4.9	51.7	− 3.9	63.6	− 2.2	..	......	77.5	+ 1.1	75.3	+ 0.7	66.6	− 2.7	57.6	− 0.9	50.6	+ 3.4	36.4	0.3		
rmers	42.8	+ 7.5	35.2	− 0.4	40.1	− 4.8	53.6	− 0.8	.....		67.4	− 4.0	76.2	+ 1.3	75.0	+ 1.2	64.4	− 4.1	55.4	− 1.2	46.5	+ 1.5	......			......
ysville	37.6	+ 5.3	30.5	− 2.9	39.6	− 4.5	52.8	− 0.8	65.6	+ 0.5	68.9	− 4.0	78.5	+ 1.5	76.6	+ 0.9	64.4	− 5.2	55.2	− 1.9	44.4	− 0.2	31.8	− 2.0	53.8	− 1.1
ddlesboro	45.2	+ 7.4	38.8	− 0.1	47.2	1.3	56.0	− 0.2	66.4	+ 1.7	69.2	− 3.0	75.8	+ 1.1	75.8	+ 1.4	65.8	− 3.0	57.0	− 0.2	47.2	+ 1.4	37.2	− 0.7	56.8	+ 0.4
ount Sterling	37.6	+ 3.8	31.4	− 1.9	40.4	− 3.7	52.6	− 0.8	66.0	+ 2.1	69.1	− 3.3	77.4	+ 1.8	75.2	+ 1.3	64.8	− 2.8	55.2	+ 0.4	45.6	+ 1.3	ᵃ32.7	− 2.7	54.0	− 0.4
chmond	42.2	+ 8.5	35.2	+ 0.3	43.8	− 1.5	54.2	− 1.0	68.4	+ 2.9	71.0	− 2.4	78.3	+ 1.4	76.8	+ 1.2	67.8	− 2.8	59.2	+ 1.3	49.6	+ 2.8	37.7	+ 0.4	57.0	+ 0.9
eeksbury	41.4	...	31.1	..	39.1	......	49.8	......	......				75.8	.....	76.1	.	68.1	......	59.2	.....	50.2	....	42.0	...		
lliamsburg	44.2	+ 6.3	37.0	− 0.5	45.6	− 0.5	56.0	+ 0.6	68.0	+ 1.7	72.2	− 1.3	78.0	+ 1.2	76.8	+ 0.7	67.0	− 3.6	56.2	− 3.7	46.6	− 0.5	37.0	− 1.3	57.0	0.1

All temperature data are taken from self registering thermometers

The departures from normal temperature are computed only for such stations as have ten or more years of record, but all complete reports are used in determining ection or division means

Reference letters, a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc

Highest Monthly Temperatures for the Year 1916, with Dates.

Stations.	January.		February.		March.		April.		May.		June		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
WESTERN DIVISION.																								
Beaver Dam	72	12	70	22	76	13†	82	13	90	26†	96	24	96	27	96	11†	94	7	93	7	83	5	70	7
Blandville	69	12	66	17	79	21	79	13	89	13†	92	22	96	25†	95	7	91	6†	87	7	82	4	72	4†
Calhoun	72	12	70	22	78	13	82	13†	92	26	97	30	97	17†	97	7†	94	6†	92	7	81	4	71	7
Earlington	76	30	72	22	80	21	84	13†	95	26	97	30	101	27	101	4†	98	7†	97	7	82	5	73	7
Greenville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96	7	92	7	79	4‡	70	7
Hopkinsville	73	12	68	17†	82	21	83	19	92	10	92	30	96	25†	98	20	93	7	90	7	79	4†	70	7
Marion	.....	.....	.....	.....	.....	.....	.....	.....	90	13†	99	30	100	17	97	7	93g	7	91	7	80	5	72	7‡
Mayfield	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93	8	90	7‡	79	5†	72	4‡
Owensboro	71	11	69	21	75	23	80	13†	88	26	93	30	97	27†	96	7	91	7	90	7	80	4†	71	7
Paducah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96	6†	94	6	81	4†	74	4
Princeton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89c	7	79b	4†	.....	.....
Russellville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98	12	96	7	97	7	79	4†	69	6
CENTRAL DIVISION.																								
Alpha	70	29	65	11†	75	24†	85	20	88	10†	88	30	88	6	88	6	.....	.....	84	7	80	6	74	5
Anchorage	71	12†	65	22	77	24	84	19	92a	26	91	29†	98	27	95	4†	93	7	92	7	80	6	69	7
Bardstown	73	12	69	22	78	24	84	13†	94	26	95	29†	102	27	99	19	96	7	94	6	80	5	70	8
Bowling Green	73	12	69	22	82	13†	87	30	97	25†	97	29†	99	16	99	11†	96	6†	93	8	80	5	70	7
Edmonton	78	30	68	22	77	13†	82b	13†	92b	27	91†	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69	7
Eubank	72	21	66	22	79	25	84	20	89	14†	91	30	92	16	94	6	91	7	93	7	75	7	66	7
Frankfort	76	12	70	22	80	25	85	13†	98	28	93	30	96	27	96	7	91	7	86	7	76	4	67	7
Franklin	72	12	67	17†	80	21	84	13	90	10†	93	29	94	3	93	7	91	6†	85	5‡	76	4†	67	7
Greensburg	73	12	68	22	79	25	82	13†	92	27	94	30	95	2†	98	6	92	7	87a	6	80	6	70	7
Irvington	72	12	69	22	76	24	82	19	89	14†	90	30	94	27†	94	7†	92	7	88	8	76	4†	68	7
Junction City	70	12†	66	22	79	25	83	13†	90	14†	94	30	95	24†	96	18†	93	7	92	7	78	6	68	7
Leitchfield	71	12	68	22	76	13	83	13	89	10	93	30	96	16	95	6†	92	7	88	7	79	6	69	7
Lexington	69	30	63	22	76	25	79	20	89	26	90	30	94	27	93	19	89	7	88	7	76	6	66	7
Loretto	72	30	72	22	80	26	82	13	90	26†	91	30	96	27	93	6†	92	7	88c	7	78	2	69	7
LOUISVILLE	72	12	67	22	76	24	81	19	90	26	92	30	98	27	95	7	92	7	89	7	78	6	69	7
Do (Cherokee Park)	72	12	68	22	78	24	82	20	89	10†	88	30	93	27†	92	7	89	6	85	8	77	4†	69	7
St. John	70	12†	67	20†	76	24	83	13	89	27	93	30	95	2†	97	4†	94	7	90	7	78	5†	68	7
Scott	69	12†	65	22	77	25	80	19	89	26	89	30	98	27	98	5	89	7	88	8	77	4	65	1†
Shelbyville	72	12	67	22	76	24†	82	19	92	14	93	30	100	27	99	7	94	6†	94	7	80	6	67	7
Taylorsville	72	12	66	22	77	24	81	19	92	25†	90	26†	95	27	94	4†	90	6†	86	7	77	4	67	7
Williamstown	70	21†	65	22	76	25	82	19	90	14†	94	30	99	27	97	7	91	6†	93	7	78	3	68	7
EASTERN DIVISION																								
Beattyville	76	21	69	22	84	25	89	20	95	26	94	27	99	30	96	2	95	7	93	7	81	7	75	8
Berea	70	22	65	22	73	24	79	20†	83	13	92	30	96	1	93	6†	91	7	91	7	79	6	70	7
Farmers	73	21†	68	1†	75	27	87	20	.....	.....	87	29	95	26	95	5	91	7	87	6	76	4†	64	27†
Maysville	73	21	68	22	83	25†	85	19	94	26	94	30	100	27	98	3†	95	6	91	7	78	4†	71	4
Middlesboro	72	26	67	12†	80	25†	85	13†	90	12†	91	30	90	1†	90	5†	90	7	86	7	77	6	69	5
Mount Sterling	70	26†	65	22	80	25	85	20	91	14†	92	30	95	27	94	6	91	6†	87	7	77	6	67a	4†
Richmond	71	21	65	22	80	25	84	20	91	14†	92	30	95	24	94	19	92	7	92	7	79	6	68	7
Weeksbury	68	12	58	21	73	26	75	19	81	10	89	28	94	27	92	7†	94	7	91	8	79	7	70	6
Williamsburg	72	12	68	17†	81	25	87	20	95	28	96	26	95	16	92	11	92	7	88	6	78	13	68	8

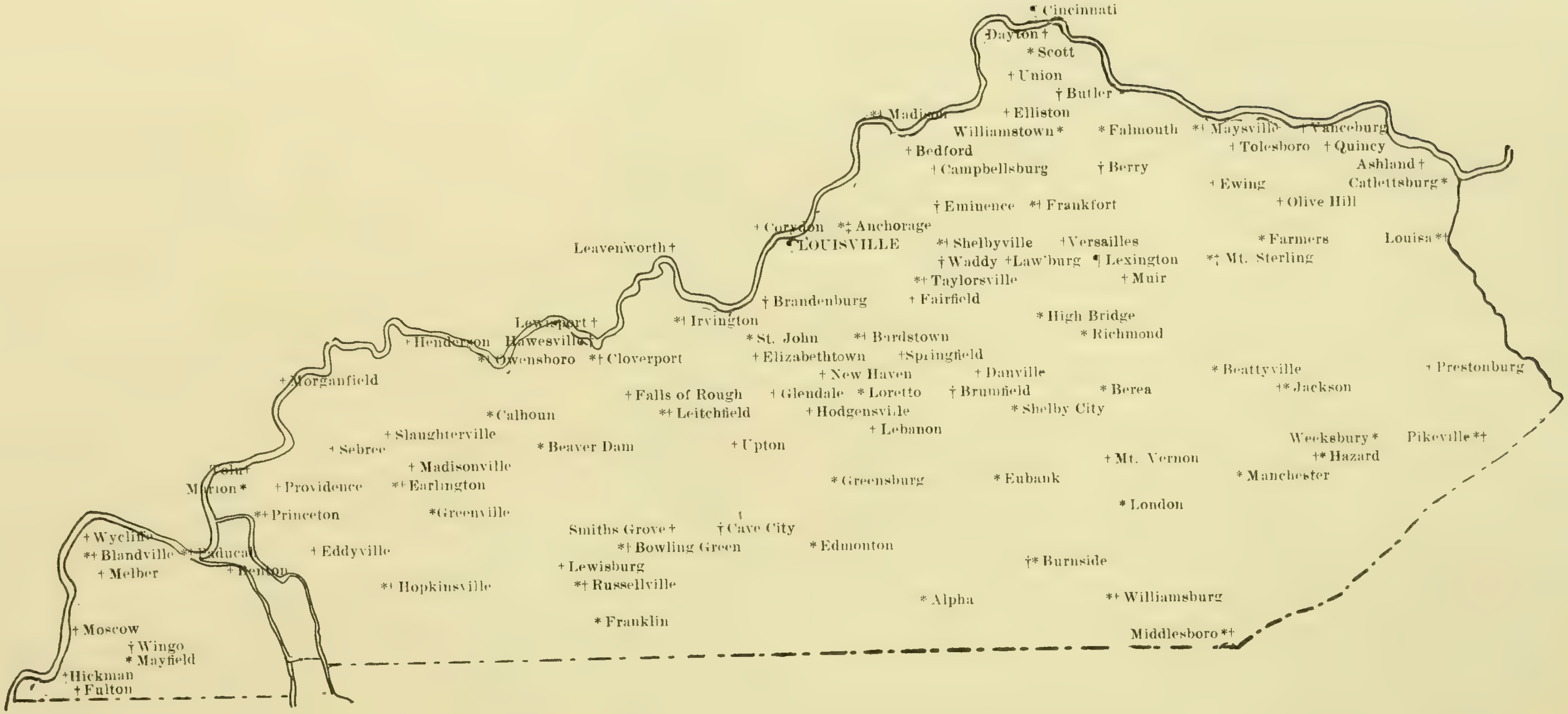
† Also on other dates.

Lowest Monthly Temperatures for the Year 1916, with Dates.

Stations	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
WESTERN DIVISION.																								
ver Dam	3	17	13	11†	16	4	29	9	41	19	51	18	59	5	49	29	35	30	29	22	13	15	0	[illegible]
ndville	5	14†	12	3	18	4	32	9	48	2†	54	4	64	5	54	30	39	30	32	21	14	15	2	15
ioun	2	16[a]	11	3	14	4	29	9	41	19	48	4	62	5†	49	29	35	16	29	26	12	15†	-4	15
lington	2	16	12	3†	14	4	30	9	41	19	49	4	59	5	50	29†	34	30	29	22	13	15	-5	15
enville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35	16	28	22	12	15	2	15
kinsville	1	17	12	3	16	4	32	9	41	17†	52	4	62	5	52	29	38	16	30	22	15	15	4	16†
ton	.....	.....	.....	.....	.....	.....	.....	.....	47	2†	58	6	.....	.....	52	29	35	30	30	21	15	15	3	15
field	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34	30	30	22	14	15	-5	15
ensboro	6	14	14	3	15	4	30	9	43	19	51	4	64	4	53	30	38	16	32	22	16	15	11	15
ucah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	30	31	22	16	15	0	15
ceton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35[b]	22	22[b]	26		
sellville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	28†	34	30	28	21†	11	14	0	15
CENTRAL DIVISION.																								
ha	2	19	12	3†	15	4†	32	9	41	17†	52	4	59	5	54	30	.....	.....	30	22	17	16	9	19
chorage	1	17	4	14†	4	4	27	10	36a	19	46	4	58	6	48	29	35	30	24	22	8	15	9	16
dstown	4	17	4	14	12	4	29	10	40	19	50	4	61	5†	50	29	36	16	27	21	12	14†	0	16†
wling Green	1	17†	9	14†	12	4	26	9	43	19	49	4	61	5	51	29	38	16†	30	22†	15	15	3	19†
monton	2	18†	8	14	11	4	28	10	40[c]	16†	45[j]	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	19
bank	0	17†	2	14	8	4	26	10	34	19	45	4	58	23	48	30	33	20	24	22	12	16	1	19
nkfort	2	17	4	15	10	4	26	10	37	19	49	4	58	5†	50	29	37	19	28	22	14	15	5	19
nklin	4	17	12	14	16	4	28	9	46	17	54	4	62	5	53	29	38	30	31	22	14	15	6	15
ensburg	1	17†	6	14†	14	4	25	10	37	19	47	4	57	6	49	29†	33	16†	25[a]	22	12	16	7	19
ugton	0	17	9	14	14	4	29	9	41	19	48	4	63	5†	52	29†	37	16	29	22	15	15	2	15
ction City	-4	17	0	14	6	4	26	10	36	19	45	4	58	6	50	31	34	20	24	22	12	16	10	19
tchfield	-1	17	8	14†	14	4	28	9	41	19	48	4	61	6	51	29†	35	16	27	22	10	15	3	15†
ington	4	17	2	14	9	4	29	9	44	17	54	10	62	4	54	29	39	30	33	22	14	15	2	16
etto	-4	17	2	15	10	1	27	10	34	19	47	4	55	6	48	30	32	16	24[c]	22	10	15	1	19
ISVILLE	0	17	11	14	13	4	30	9	47	19	54	4	63	6	55	29	40	30	31	22	18	15	2	15
o (Cherokee Park)	1	17	5	14	10	4	29	9†	38	19	48	4	59	5†	52	29	36	30	27	22	14	15	2	16
John	-3	17	2	14	11	4	27	9†	37	19	47	4	61	5	50	29	32	19	26	22	11	15	-4	19
tt	-3	17	-1	15	7	4	29	10	34	19	51	11	56	5	51	30	35	16†	26	22	10	15	-1	16
lbyville	-3	17	1	14	6	4	28	10	37	19	48	4	57	6	48	29	35	16†	26	22	10	15	4	16†
lorsville	-3	8†	2	14	9	4	26	10	34	19	46	4	53	5	47	29	34	19†	24	22	10	15	9	16
liamstown	5	18	0	14	4	4	23	7	40	19	50	1	58	6	51	29	35	30	29	22	10	15	2	16
EASTERN DIVISION.																								
ttyville	-1	18	3	14	7	4	25	10	35	19	48	1	52	6	55	24	32	19	30	23†	10	25	-12	19
ea	-2	17	1	14	6	16	29	10	40	17	47	4	55	5	49	24	32	19	25	22	15	15†	-1	19
mers	0	17	0	14	10	4†	23	10	.....	.....	45	1	52	6	52	24	34	19†	26	27	10	16	-14	19
rsville	-3	17†	-4	14	5	4	26	10	33	19	48	1	54	5†	52	24†	32	30	28	22†	14	15†	-7	19
dlesboro	3	18	10	4	14	4	25	10	39	17	49	4†	55	5	53	25	38	16†	28	27	14	16	-12	19
unt Sterling	-5	17	-3	14	5	4	26	10	35	19	49	4	56	5	49	29	34	19	25	22	14	15	6[a]	19
mond	-1	17	0	14	8	4	30	9	42	19	55	10†	59	6	53	24†	38	19†	28	22	15	15	2	16
ksbury	3	18	8	4†	11	5	26	10	38	19	49	1†	55	5†	54	31	40	19†	31	22†	18	16	-3	19
liamsburg	2	19†	12	14†	15	4†	26	10	39	17	51	1†	56	5	52	25	36	19	29	23†	14	16†	-12	19

† Also on other dates.

CHART SHOWING METEOROLOGICAL AND FORECAST DISTRIBUTING STATIONS



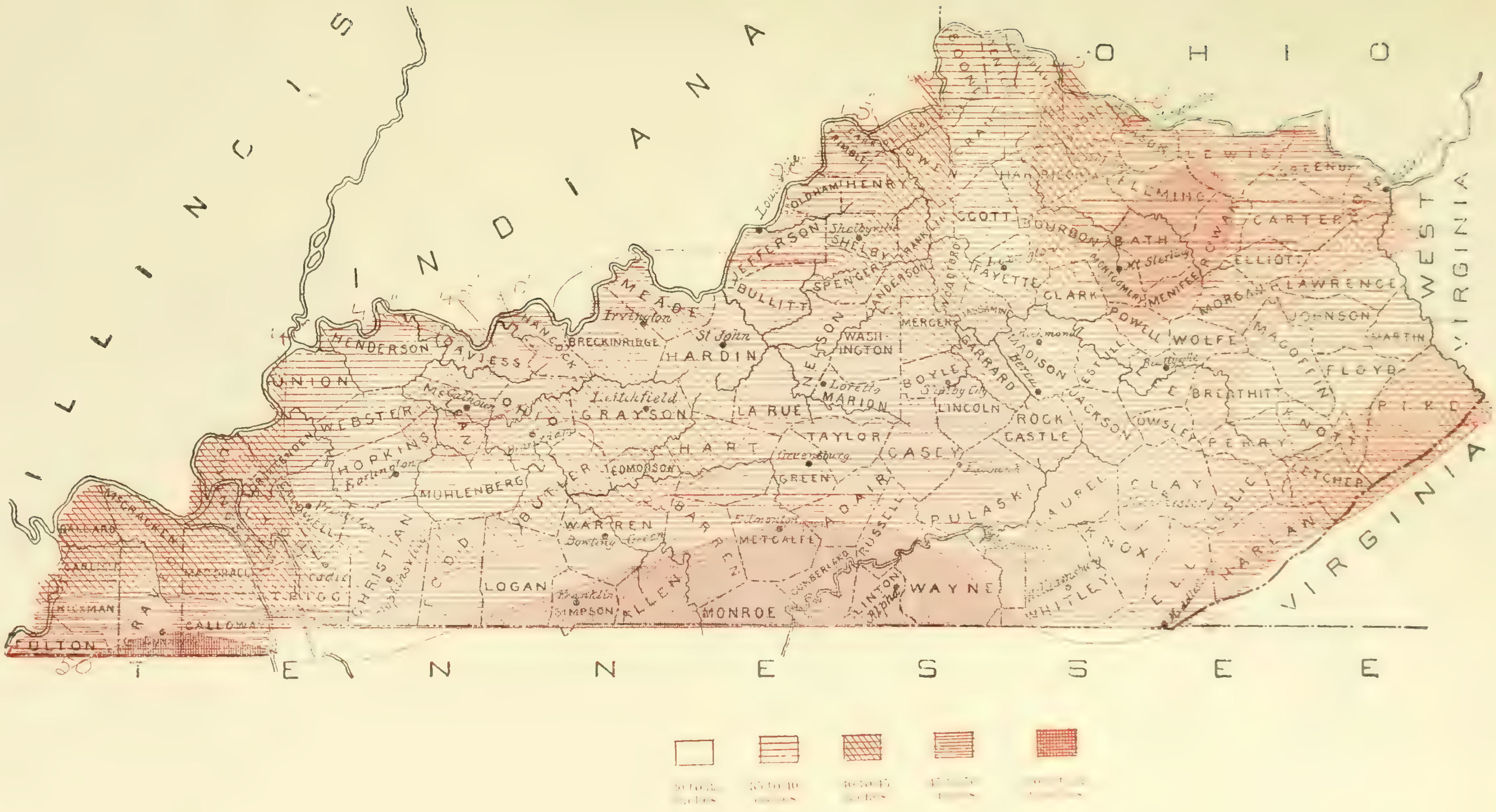
KEY TO SYMBOLS:

¶ Meteorological Observations. (Regular Weather Bureau Stations.

* Meteorological Observations. (Sub Stations.)

† Display or Distribution of Forecasts.

TOTAL PRECIPITATION, 1916.



LISTS OF COOPERATORS.

Cooperative Observers.

Stations.	Observers.	Stations.	Observers.	Stations.	Observers.	Stations.	Observers.
Alpha	C. E. Barret.	Earlington	Brick Southworth.	Jackson	J. L. McCoy.	Paducah	E. Futrell, Jr.
Anchorage	W. W. Hicks.	Edmonton	P. W. Ray.	Leitchfield	John E. Stone.	Pikeville	I. M. Williams.
Bardstown	Chas. M. Talbott.	Eubank	Mrs. Katie Payne	Lexington	U. S. Weather Bureau	Princeton	Dr. J. A. H. Mill
Beattyville	A. H. Bowman.	Falmouth	J. V. Oldham.	Loretto	Loretto Academy.	Richmond	J. W. Crooke.
Beaver Dam	W. T. Austin.	Farmers	Durwood Cassity.	Louisa	F. C. Sammons.	Russellville	E. C. Shelton.
Berea	C. F. Rumold.	Frankfort	Mrs. Amelia Wood	Louisville	U. S. Weather Bureau	St. John	Bethlehem Acade
Blandville	E. W. Horr.	Franklin	J. E. Newman.	Manchester	Mrs. Geo. P. Hatton	Scott	E. B. Wilson.
Bowling Green	Mrs. L. G. Causey.	Greensburg	Mrs. B. K. H. Alcorn	Marion	B. C. Paris.	Shelby City	H. F. Ewing.
Burnside	C. L. Hurt	Greenville	C. R. Lovell.	Mayfield	J. N. Davis.	Shelbyville	Mrs. L. A. Burnet
Calhoun	W. A. Taylor.	Hazard		Maysville	Mrs. Mary D. Marsh.	Taylorsville	E. D. Bourne.
Catlettsburg	Mrs. Mertie M. Bruns	High Bridge	Miss Lulu Wood.	Middlesboro	B. H. Perkins.	Weeksbury	O. A. Lund
Cherokee Park	Wm. I. Hunt.	Hopkinsville	W. F. Randle.	Mount Sterling	W. R. McKee.	Williamsburg	N. C. Jones.
Cloverport	W. A. Cockerill.	Irvington	W. J. Piggott.	Owensboro	Henry S. Berry.	Williamstown	Miss Rose Carter

Daily Forecast Display and Distributing Stations.

Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen
Ashland	Park City Tel. Co.	Elizabethtown	Mgr. Cum. Tel. Office	Lexington	U. S. Weather Bureau	Pikeville	E'n Ky. Home Tel
Bardstown	Mgr. Cum. Tel. Office	Fairfield	Peoples Tel Co	Louisa	Sou. Bell Tel. & T. Co	Prestonburg	Sou. Bell Tel. Co.
Bedford	Mgr. Cum. Tel. Office	Frankfort	Mrs. Amelia Wo	Louisville	U. S. Weather Bureau	Princeton	Mgr. Cumb. Tel. C
Benton	Mgr. Cum. Tel. Office	Franklin	Farmers Mut'l Tel Co.	Madisonville	Mgr. Cumb. Tel. Co.	Quincy	Vanceburg Tel. C
Bowling Green	A. M. Causey.	Fulton	Fulton Leader.	Madison .... Ind.	Chas. G. Dickerson	Richmond	J. W. Crooke.
Brandenberg	Mgr. Cum. Tel. Office	Hazard	Mgr. Cum. Tel. Office	Maysville	Mrs. Mary D. Marsh	Shelbyville	Mgr. Cumb. Tel. C
Brumfield	Postmaster.	Henderson	Mgr. Postal Tel Office	Melber	Postmaster.	Stithton	Miss M. Buckma
Burnside	A. B. Massey.	Hickman	Sexton & Speer	Middlesboro	B. H. Perkins.	Taylorsville	Cumb. Tel. Co.
Cadiz	Mgr. Cum. Tel. Office	Hodgenville	Mgr. Cum Tel. Office	Morganfield	Mgr. Cumb. Tel. Co.	Tolesboro	Vanceburg Tel. C
Catlettsburg	Mrs. M. M. Bruns.	Hopkinsville	Christian-Todd T. Co	Mount Sterling	Cumb. Tel. Co.	Tolu	Tolu Teleph. Co.
Cave City	Geo. T. Tucker.	Irvington	Mgr. Cum. Tel. Office.	Mt. Vernon	Cumb. Tel. Co.	Union	Cons. Telephone
Cloverport	Wm. A. Cockerill	Jackson	Mgr. Cum. Tel. Office	New Haven	Mgr. Cumb. Tel. Co.	Vanceburg	Vanceburg Tel. C
Corydon .... Ind.	Mgr. Cum. Tel. Office	Lawrenceburg	Mgr. Cum Tel. Office	Olive Hill	B. S. Tel. Co.	Versailles	Postmaster
Danville	Mgr. Cum. Tel. Co.	Lebanon	Cumb. Tel. Co.	Owensboro	Mgr. Cum. Tel. Office	Wickliffe	Mgr. Cumb. Tel. C
Earlington	Brick Southworth.	Leavenworth .. Ind.	Mgr. Cum. Tel. Office	Paducah	East Tenn. Tel. Co.	Williamsburg	Mgr. Cumb. Tel. C
Eddyville	Mgr. Cum. Tel. Office	Leitchfield	Mgr. Cumb. Tel. Co.				

Cold Wave and Frost Warning Stations.

Berry	G. C. Matthews.	Eminence	W. H. Holland.	Lewisburg	Postmaster.	Sebree	J. A. Powell.
Butler	Peoples & Voirs.	Ewing	W. B. Sherwood.	Lewisport	J. D. Blincoe.	Slaughtersville	W. L. Reynolds.
Campbellsburg	Postmaster.	Glendale	Postmaster.	Moscow	W. H. Ferguson.	Smith's Grove	Randall & Son.
Dayton	Postmaster.	Hawesville	W. S. Thomas.	Muir	J. W. Woolums.	Springfield	Ed. Davison.
				Providence	T. B. Paine.	Upton	Postmaster.
				Russellville	James W. Clark.	Waddy	Postmaster.
						Wingo	E. T. Stephenson.

NOTE—Tables and charts giving climatic data for Kentucky in detail during 1916 have been published for each month at the Kentucky section center, Weather Bureau Office, Louisville, Ky., and can be obtained from the Official in Charge at that office. Indexes to special articles published during past years in Kentucky climatological reports will be found in the Monthly Report for June, 1909,

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

[illegible] 1917

CLIMATOLOGICAL DATA

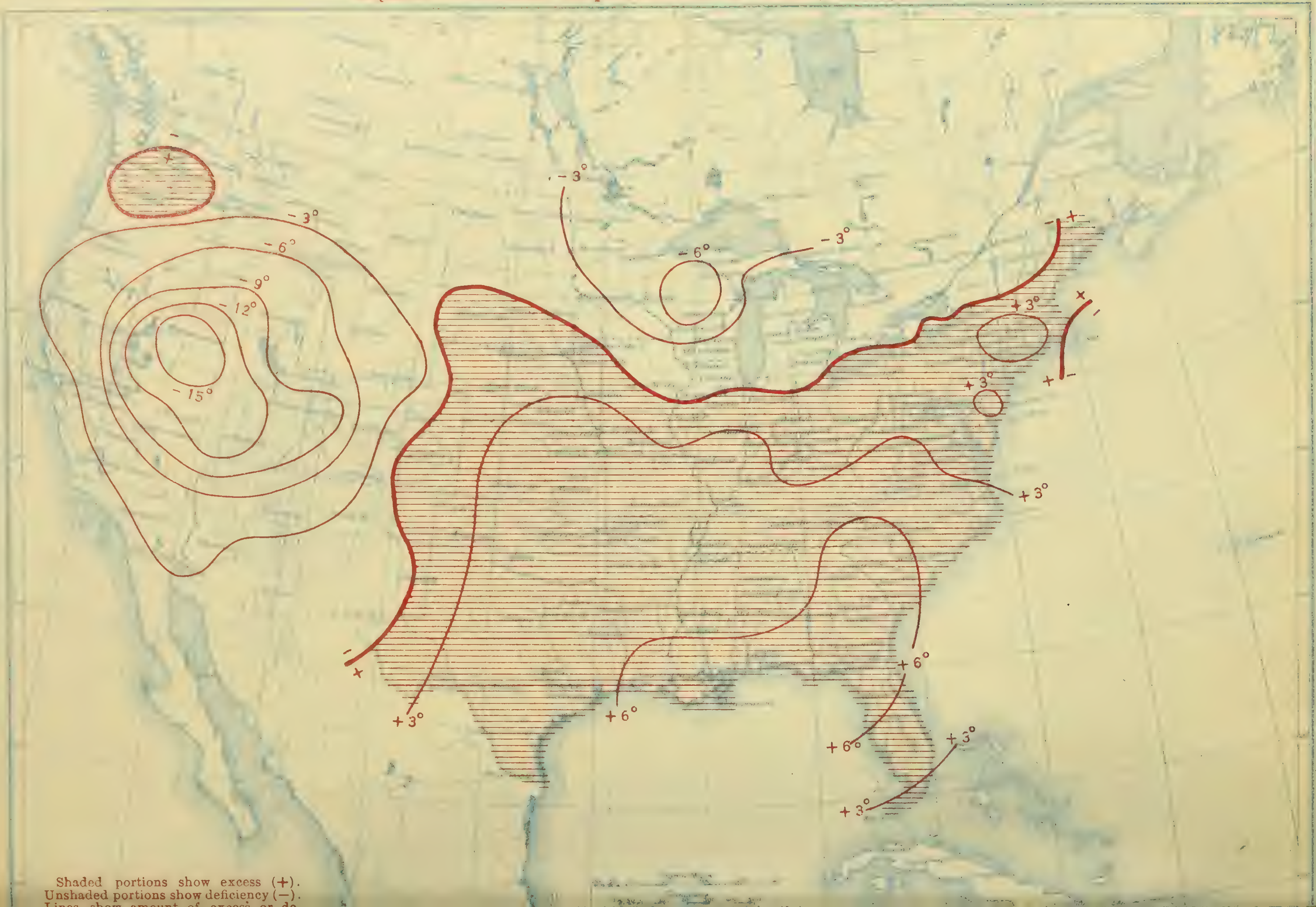
KENTUCKY SECTION

JANUARY, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 24, 1917

Departure of the Mean Temperature from the Normal, January, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XXII. Louisville, Ky., January, 1917. No. 1.

GENERAL SUMMARY.

Heavy snow and much cold weather characterized conditions revailing during the month, although the temperature for the onth averaged above normal. Mild weather largely prevailed uring the first decade, with maximum temperatures in the 60's n several days; also there were frequent thunderstorms. A nange to colder on the 10th ushered in a period of severe eather that lasted with varying intensity until the 20th. inimum temperatures below zero were registered at nearly all ations on the 14th, and at several stations on the 19th. Snow t in on the 13th and continued, with only short intermissions, ntil the 15th. The total fall for the State on these three days veraged near 12 inches, and was practically all the snow that ll during the month. The ground was covered with snow ntil the 20th, or during the period of lowest temperature, hich was of great benefit to wheat. High temperature and eneral rains (heavy in central and eastern counties) about the 1st carried off the last of the snow. Combined water from the elted snow and rains caused considerable damage by erosion fields and by floods in headwater streams, especially the icking River. Several hard, spewing freezes occurred after the ow covering disappeared, and while the ground was still turated with water, damaging wheat in many localities. Mild eather set in again on the 27th, and abnormally high temperaures, registering in the 70's at many stations, continued until e end of the month. Thunderstorms were again quite general n the 27th and 31st.

PRESSURE.

Nine distinctive low pressure formations and six distinctive igh pressure formations passed across the east-central states uring the month and affected weather conditions over the tate. Lows occurred as follows: (1) A low of moderate energy assed across the Lake region and Ohio Valley on the 1st; 2) a trough of low (with center over the Lake region) swept cross the Lake region and Ohio Valley on the 3d, attended by eavy rains, thunderstorms and high temperature; and, (3) was llowed during the 4th and 5th by another low which moved rom Texas up over the Mississippi and Ohio Valleys and Lake egion to the north Atlantic coast during that period, also ttended by heavy rains and thunderstorms. (4) During the -10th a low of moderate energy swept across the Lake region nd Ohio Valley; and (5) during the 12-13th two lows, one noving across the Lake section and the other northeastward rom the lower Mississippi Valley, the two coalescing in the astern Lake region, caused heavy snows over the Ohio Valley. 6) During the 20th-21st a low of great energy passed from olorado across the central valleys to the lower Lakes attended y rain. (7) On the 27th a low from the Southwest passed ver the Ohio Valley attended by rain and thunderstorms. (8) n the 29th a vast low swept across the Lake region and Ohio alley, attended by heavy rains and high temperature; and (9) n the 31st a deep low swept from Colorado across the central alleys and Lake region, attended by rain and thunderstorms, nd closely followed by a severe cold wave. High pressure reas, mostly attended by cold waves, obtained in the periods, -8th, 10-11th, 14-15th, 16-19th, 22d-23d, and 30th.

The mean sea-level pressure, based on the records of two tations, was 30.10 inches. The extremes were 30.80 inches on he 16th and 29.37 inches on the 5th, both at Louisville.

TEMPERATURE.

The average temperature for the State, determined from the reports of 42 stations, was 36.7° which is 1.3° above normal. Temperatures of 70° or higher occurred on the 4th, 5th, 29th, 30th and 31st. Maximum temperatures at most stations occurred on the 31st. The highest for the State was 74° at Beattyville on the 29th, and the lowest —17° at Taylorsville on the 14th, giving a temperature range for the month of 91°.

PRECIPITATION.

The average precipitation for the State, computed from the records of 52 stations, was 6.38 inches, which is 2.16 inches in excess of normal for January. The most important precipitation feature was the remarkably heavy snowfall. Monthly totals in the upper basins of the Green and Licking rivers exceeded 20 inches and ranged from 10 to 16 inches over the area from the lower Cumberland to the Big Sandy. This heavy snowfall in the central counties was an important factor in producing the floods in the headwaters of the Kentucky and Licking rivers on the 22d. The principal periods with precipitation were: 1st-5th, 13-15th, 21st-22d, and 27-29th. Monthly amounts exceeded 8 inches over the basin of the Big Barren River and over the headwaters of the Dix and Salt rivers. Over the rest of the State amounts ranged generally between 5 and 8 inches. At the various stations monthly amounts ranged between 3.69 inches at Louisa and 9.60 inches at Junction City.

WIND.

The total wind movement at Louisville was 9,443 miles, and at Lexington 10,913 miles, with average hourly velocities of 12.7 and 14.7 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 50 miles per hour from the west on the 21st, and at Lexington 52 miles per hour from the south on the 5th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 82 per cent, at 2 p. m. 65 per cent, and at 7 p. m. 72 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 38 and at Lexington 29.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in or more.
1889	38.0	+2.6	65	13	3.52	−0.70	
1890	44.0	+8.6	77	10	6.43	+2.21	
1891	37.0	+1.6	68	14	5.40	+1.18	
1892	29.0	−6.4	65	− 6	2.72	−1.50	
1893	26.0	−9.4	67	−22	2.08	−2.14	
1894	38.0	+2.6	78	−12	2.91	−1.31	
1895	30.0	−5.4	78	−16	5.71	+1.49	11
1896	36.1	+0.7	74	− 3	1.25	−2.97	6
1897	32.0	−3.4	75	−16	3.25	−0.97	8
1898	40.4	+5.0	72	6	8.76	+4.54	12
1899	34.4	−1.0	68	−18	6.23	+2.01	11
1900	37.2	+1.8	77	− 8	2.80	−1.42	8
1901	36.7	+1.3	75	4	1.85	−2.37	7
1902	33.7	−1.7	70	5	5.14	+0.92	7
1903	34.8	−0.6	82	− 9	2.50	−1.72	9
1904	32.3	−3.1	70	− 9	3.17	−1.05	10
1905	27.5	−7.9	70	−15	2.83	−1.39	11
1906	39.7	+4.3	80	− 9	3.48	−0.74	8
1907	43.2	+7.8	83	−11	8.02	+3.80	14
1908	35.0	−0.4	62	7	2.20	−2.02	8
1909	38.3	+2.9	77	− 8	3.47	−0.75	9
1910	33.8	−1.6	70	−20	4.41	+0.19	10
1911	39.7	+4.3	73	−16	2.88	−1.34	11
1912	25.9	−9.5	61	−20	3.09	−1.13	8
1913	42.5	+7.1	76	13	11.41	+7.19	14
1914	39.4	+4.0	79	5	2.31	−1.91	6
1915	33.0	−2.4	65	0	5.03	+0.81	13
1916	41.2	+5.8	78	− 5	7.27	+3.05	14
1917	36.7	+1.3	74	−17	6.38	+2.16	12

Climatological data for January, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	14	37.6	+ 2.8	69	31	− 9	14	34	4.95	+0.51	1.80	10.0	9	8	8	15	s.	W. T. Austin.
Blandville	Ballard	445	35	39.4	+ 6.0	70	31	− 2	14	38	5.13	+0.72	1.39	8.0	10	6	11	14	sw.	E. W. Horr.
Calhoun	McLean	437	13	37.6	+ 0.7	68	29†	− 3	14	38	6.32	+1.42	1.65	12.0	12	4	16	11	nw.	W. A. Taylor.
Earlington	Hopkins	420	26	37.0	+ 1.4	71	29	− 3	14	46	5.10	+0.97	2.18	7.0	13	15	0	16	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	38.2	......	70	31	− 6	14	37	5.11	......	1.26	10.5	13	......	......	......	......	C. R. Lovell.
Hopkinsville	Christian	524	20	40.4	+ 2.4	71	29	− 6	14	38	7.60	+2.47	1.55	12.0	13	8	6	17	w.	W. F. Randle.
Marion	Crittenden	571	18	^{f}40.0	+ 4.0	67	30^{1}	0	15	35^{1}	5.63	+0.83	1.27	10.0	8	11	11	9	ne.	B. C. Paris.
Mayfield	Graves	364	7	38.0	......	69	4†	−10	14	47	4.90	......	1.70	9.5	8	......	......	......	......	J. N. Davis.
Owensboro	Daviess	479	20	36.2	+ 0.7	67	31	− 6	14	30	5.07	+0.56	1.15	8.0	12	7	4	20	se.	Henry S. Berry.
Paducah	McCracken	341	17	40.7	+ 3.3	72	31	2	14	40	6.34	+2.08	1.80	8.6	11	19	0	12	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{b}38.6	+ 4.8	70	31^{b}	9	14^{b}	28^{b}	5.20	+1.92	1.30	10.0	7	9^{b}	17^{b}	13^{b}	w.	Dr. J. A. H. Miller.
Russellville	Logan	590	5	^{e}36.6	......	66	28†	4	18^{f}	39^{f}	8.43	......	2.20	11.0	8	5	12	14	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	41.9	+ 1.6	69	29	10	12†	29	7.07	+2.22	1.85	7.7	12	5	5	21	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	33.9	+ 0.3	66	30	−15	14	36	6.26	+2.60	1.44	10.5	12	10	9	12	sw.	C. E. Barret.
Bardstown	Nelson	637	20	35.5	− 0.4	67	29	− 6	14	41	6.74	+1.91	1.41	17.2	13	9	7	15	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	36.2	− 0.8	71	30	− 2	14	50	8.27	+3.63	1.91	14.0	11	9	13	9	n.	Mrs. Lillie G. Causey.
Burnside	Pulaski	773	24							......	7.71	+3.96	2.45	11.0	11	......	......	......	......	C. L. Hurt.
Cloverport	Breckenridge	375	3								5.35	......	1.39	6.2	14	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	38.1	+ 2.2	66	5	3	14	42	7.36	+3.31	1.90	12.0	13	7	9	15	w.	P. W. Ray.
Eubank	Pulaski	1177	22	35.5	+ 0.6	68	29^{b}	2	14†	32	7.30	+3.33	1.51	11.0	15	6	6	19	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	35.6	− 0.6	67	31	6	14	39	5.95	+2.33	1.48	13.2	14	7	7	17	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	38.5	+ 0.9	68	29	2	14	32	7.36	+3.76	2.15	11.0	11	2	13	16	se.	J. E. Newman.
Greensburg	Green	581	24	35.0	+ 0.8	69	29	− 5	14	51	7.71	+3.68	1.75	20.0	14	6	6	19	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	......						......	6.34	+2.10	1.00	18.5	15	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	19	37.0	+ 0.8	66	29	− 4	14	30	4.87	+0.42	1.18	7.5	11	11	5	15	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	36.4	+ 1.8	68	31	− 9	11	41	9.60	+5.18	1.81	21.0	16	9	6	16	sw.	H. F. Ewing.
Leitchfield	Grayson	635	21	36.4	+ 1.3	67	29	−11	14	33	7.46	+2.94	1.50	13.6	11	7	13	11	s.	John E. Stone.
Lexington	Fayette	989	29	35.2	+ 2.2	65	31	4	14	33	5.67	+1.84	1.61	16.8	15	7	8	16	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	34.8	− 1.6	69	29^{b}	7	18	44	8.38	+3.67	2.00	18.0	14	9	8	14	......	Loretto Academy.
LOUISVILLE	Jefferson	525	44	35.9	+ 1.6	64	31	5	14	32	6.12	+2.22	1.40	9.9	13	6	9	16	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	7	35.0	......	65	29†	− 8	14	35	6.45	......	1.44	9.0	13	9	9	13	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	33.2	− 0.9	69	2	16	15	51	6.99	+2.42	1.51	13.3	18	12	10	9	......	Sisters of Loretto.
Scott	Kenton	900	19	33.6	+ 0.5	66	31	− 6	14	42	5.97	+1.88	2.42	9.5	12	6	11	14	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	31.0	− 2.6	64	29	−10	11	35	6.06	+2.09	1.60	9.8	14	9	9	13	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	34.4	− 0.7	65	29†	−17	14	37	4.63	−0.06	1.28	14.2	12	7	6	18	s.	E. D. Bourne.
Williamstown	Grant	943	14	31.8	− 0.9	66	31	− 4	14	37	5.77	+1.90	1.30	8.6	12	7	9	15	......	Miss Rose Carter.
Eastern Division.																				
Beattyville	Lee	650	13	35.5	+ 1.0	74	29†	4	12	43	5.54	+0.88	1.05	13.5	14	10	4	17	sw.	A. H. Bowman.
Berea	Madison	1070	15	38.7	+ 1.4	70	31	1	14	39	6.22	+1.69	0.90	18.0	13	11	5	15	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	28							......	5.02	+1.12	1.20	15.4	14	......	......	......	......	Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	28							......	5.42	+1.15	1.21	8.0	13	7	5	19	......	J. V. Oldham.
Farmers	Rowan	668	9	36.0	+ 0.7	67	31	− 7	14	44	6.10	+2.30	1.15	17.5	15	9	7	15	w.	Durwood Cassity.
Hazard	Perry	......	1							......	6.72	......	1.60	12.8	11	......	......	......	......	Jas. L. McCoy.
Jackson	Breathitt	776	5							......	7.11	......	2.15	......	17	......	......	......	......	C. R. Lee.
London	Laurel	1190	2							......	3.69	+0.09	0.72	......	9	......	......	......	......	F. C. Sammons
Louisa	Lawrence	584	13							......	6.70	+2.71	2.18	7.0	10	......	......	......	......	Mrs. Geo. P. Hatton.
Manchester	Clay	1400	7																	
Maysville	Mason	524	19	31.8	1.3	70	31	− 3	15	41	5.07	+1.12	1.29	14.0	13	12	6	13	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	41.8	+ 4.0	70	29	7	12	37	7.90	+3.22	1.40	......	13	9	17	5	......	B. H. Perkins.
Mount Sterling	Montgomery	930	27	33.5	− 0.3	69	31	− 6	14	33	7.41	+3.03	2.03	23.0	15	8	11	12	sw.	W. R. McKee.
Pikeville	Pike	634	11	......	......	......	......	......	......	......	5.56	+1.77	0.94	4.0	14	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	37.5	+ 3.8	72	29	2	14	37	7.96	+3.89	1.68	21.1	14	9	2	20	s.	J. W. Crooke.
Weeksbury	Floyd	1216	3	40.6	......	72	30	10	12	49	6.99	......	2.57	3.5	9	8	3	20	......	O. A. Lund.
Williamsburg	Whitley	939	19	39.6	+ 1.0	71	29†	10	14	39	7.15	+3.12	2.00	15.0	12	7	3	21	s.	N. C. Jones.
State averages and extremes				36.7	......	74	29	−17	14	51	6.38	......	2.57	12.0	12	8	8	15	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are u in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky.

MISCELLANEOUS.

January 4.—Excessive rains in the vicinity of Richmond damaged roads and lowlands. A large stock and tobacco barn was burned by lightning near Richmond.

January 22.—Extensive damage was caused by floods in headwater streams. Streets and buildings were flooded in Frankfort, Mt. Sterling, Nicholasville, Paris, Olive Hill, Farmers and Morehead. Some stock was washed away and great damage caused to roads and fields.

Rivers.—Good stages prevailed in the Ohio during the month. Flood stage was reached at Evansville on the 7th, continu until the 14th. There was considerable heavy ice in the up reaches of the Ohio bordering this State from the 16th to 20th. sharp rise in the Ohio followed the high tides in tribut streams, caused by the rains and melting snow on the 21st-2 Flood stages again obtained at Evansville from the 26th to 3 the river nearly reached the flood stage at Cloverport, and h stages were general in the upper reaches.

ERRATA.

December.—Lexington: Date of lowest temperature should be 21st.

Daily Precipitation for January, 1917.

Stations		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
aver Dam	G		[illegible]	[illegible]	[illegible]							T.		1.10		.15						.28						.20					
andville	M	[illegible]	[illegible]	[illegible]	[illegible]	1.13					T		T.	.56		.35						[illegible]						T.		.36			5.13
houn	G	[illegible]	[illegible]	.67	1.09	1.65						T.		.08	.20	.18		T.				.48	T.		T			[illegible]					
rlington	G	.07		.40	[illegible]	[illegible]	.08					.04		.44	.12	.26						[illegible]	.15						.30				5.10
envìlle		.03	.07	.40	.70	1.26								.90	.20	.15						.92	.02					.13	.04				5.11
pkinsville	C		[illegible]	.55	1.00	1.55						.10		.70	.20	.20					1.05	1.18	.20						.32			.10	7.60
rion	O.	[illegible]	T.	[illegible]	1.03	1.07									.60	.40							1.27						.27				[illegible]
yfield				[illegible]	.65	1.70	.05							.85		.15							.40										[illegible]
ensboro	O	[illegible]		1.15	[illegible]	1.06	.13					T.		.31	.10	.20						.10	.35										5.07
ducah	O	.08			1.80	1.66								.62	.10	.58						.80						.05	.03	.41		.21	[illegible]
nceton					1.00	1.30						T.		.50	.60	.40						1.00						T.	T.	.40			[illegible]
ssellville			[illegible]	[illegible]	2.20									*	1.41							[illegible]							.26		.36		8.43
Central Division																																	
pha	C	.15	.70		1.75	[illegible]						.02		.65		.20	T.		T.			1.85			T.	.05		.25	.50			.45	7.07
chorage	O	[illegible]		1.40	.22	.93					.02	T		.61	.18	.17						1.44			T			.43	T.			.13	6.26
rdstown	S	.25		[illegible]	1.41	1.03						.02		.50	.80	.20	.20				.15	1.20						.26	.06				6.74
wling Green	G		[illegible]	[illegible]	[illegible]	[illegible]	.60				T.	T.		.40	.60	.40							1.35			T.			.10	.31			8.27
rnside‖	C.	.12		.93	.85	2.45	.56					T.			.94	T.	.10				T.	.07	.95						.31	.43			7.71
overport‖	O.	.02	T	1.13	.98	1.39	.15					.06	T.	.24	.28	.06	.03		T.			.30	.30			T.			.22	.19			5.35
monton	C	.11		1.28	1.90	1.16						T.		.80	.15	.50						.01			[illegible]			.05		.50			7.36
bank	C	.14		.81	1.08	1.51						.06	.02	.30	1.05	.14	.27					.17	1.11			.04			.40	.20			7.30
ankfort‖	K.	.21		1.48	.25	.57	.17					.05	T.	.20	.69	.11	.14		T.			.45	1.17						.28	.18			5.95
anklin	G	.11	.49	.24	2.15	1.70					T.	T		.50	.40	.25						.85					[illegible]			[illegible]			7.36
ensburg	G	.09		1.12	.90	1.75	.22					T.	T.	.44	.62	.40	.45				.04	.18	1.14			T.			.25	[illegible]			7.71
gh Bridge	K	.27		.68	.95	.70	.12					.05	T.	.50	1.00	.15	.15					.07	1.50			.01			.16	[illegible]			6.34
ington	O.	.18		.91	.56	1.18					T.			.50	.10	.10						.84	T.		T.			[illegible]				.08	4.87
nction City	K.	.28		[illegible]	[illegible]	1.40	.10					.20		1.00	.40	.50						.58	1.57		.28			[illegible]	[illegible]	.10		.04	9.60
itchfield	G	.23	*	[illegible]	1.50	1.39						T.		1.10		.26						1.38			T.			.14		.10		.55	7.46
xington ***	K	.20	.03	.62	.62	.44					.01	.04		1.35	.05	.26		T.	.01		T.	1.61			T.			.18		.07		.18	5.67
retto	S	.20		.95	1.85	[illegible]	.01				.01			1.00	.40	.20						[illegible]	.50		.20			[illegible]		.05			8.38
uisville***	O	.08	.28	1.12	.85	[illegible]					.02	T.		.86	.03	.09		T				1.24	T.		T.					.46			6.12
Do (Cherokee Park)	O	.13		1.44	.24	1.00	.20					.04		.56	.30	.20							1.31							.37		.07	6.45
John	S	.26	.01	.80	[illegible]	1.15	.25					.03		.23	.38	.04	.03				.02	.28	1.51			.01			.20	.12	.02		[illegible]
ott	L.	.07		.61	T.	2.42					T.	.15		.30	.25	.15		T.				1.01	.03		T.			.05	.36	[illegible]			[illegible]
elbyville	S	.15	T.	1.60	.29	.73	.22					.03	T.	.16	.64	.03	.12					.56	1.00						.20	.27			6.06
ylorsville	S	.14	.03	.95	.53			T.			T.	.02		.60	.50	.19	T.	T.	T.			1.28	.06		T.				.21	.12		T.	4.63
lliamstown	L.	.10	T.	1.30		.82	.16					.03		.15	.60		.08					.48	1.13										5.77
Eastern Division.																																	
attyville	K.	.17		.95	.47	.72	.30					.05	.03	.08	.90	T.	.31						1.05			.20			.22	.09			5.54
rea	K.	T.	T.	.85	.90	.65	.18				.45		.12	.62	.65	.48						.40	.42			T.		[illegible]				.18	6.22
tlettsburg	B	.04	.03	.69	.19	.41	.12						.12	.13	.91		.67					.15	1.20							.12			[illegible]
lmouth‖	L.	.10		.98	T	.60	.07					.06	T.	.18	.61	.03	.08					.55	1.21						.32	.03			5.42
rmers	L.	.18	T	.73	.40	.40	.10					.17	T.	.32	.82	.30	.18					1.15	.95			.10			.17	.13			6.10
zard	K.																																
ckson	K.	.20	T.	1.00	.80	.75	.60					T.	T.	T.	.97	T.	.30		.10		T.		1.00			.05			.35				[illegible]
ndon	C	.20		1.11	.65	2.15	.40					.09	.02	.01	.78	.08	.03	T.				.10	.69	[illegible]				[illegible]	.19	[illegible]			7.11
nisa	B.	.10		.72	.40	.45	.20										.46					.30	.70							.36			3.69
nchester	K	T	.31		1.40	2.18	.63					.10			.60							.03	.91			.12				.42			6.70
aysville‖	O.	.10	T	.74	T.	.30	.10					.11	T.	.09	1.02		.20					.45	1.29			T.			.31	.25	.11		5.07
ddlesboro	C.			.90	.80	.40							.46	.36					1.06		.13	.11	1.06					.08	.12	1.08		[illegible]	[illegible]
ount Sterling	L	.24	.03	.44	.50	1.32	.25					.24	T.	.42	.90	.20	.25		T			.31	2.03			T			.15	.13			7.41
keville	B	.18	.08	.62	.94	.92	.46					.08	T.		.52						.22	.18	.62			.18			.22	.34			5.56
chmond	K	.10	T.	.68	1.32	.83	.24					.07	T.	.48	1.67	.50	.12				T.		1.68		.04				.14	.09			[illegible]
eeksbury	B			2.57		2.01						.55		.30	.05								.70					.10		.56		.15	6.99
illiamsburg	C	.13		1.22	.55	2.00	.35					T.	T.		.85	.05	.10		T.		T.	.30	.95			T.			.15	.50			7.15

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

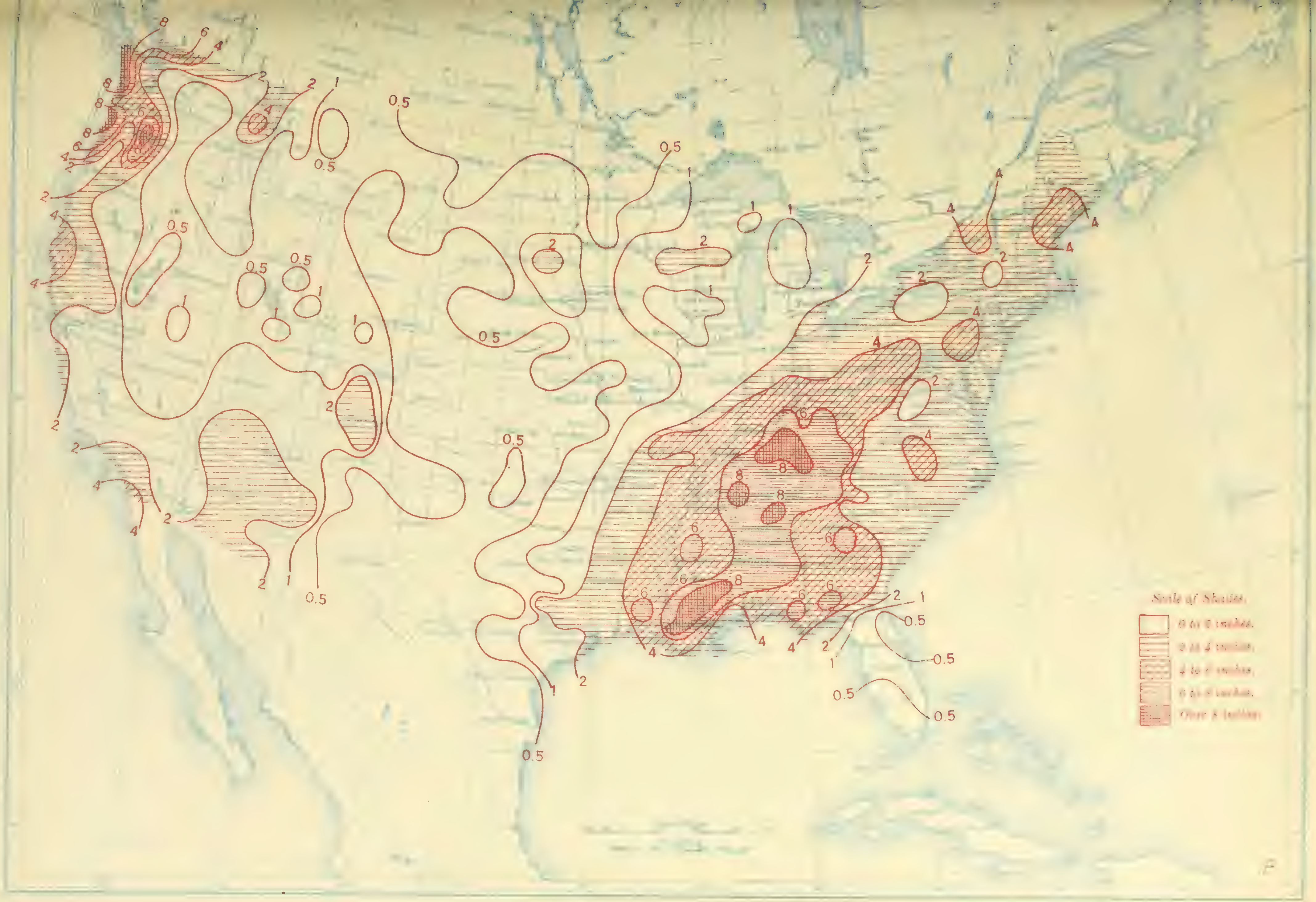
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for January, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	50	61	58	63	58	51	50	58	57	46	23	39	32	18	18	27	33	37	36	47	61	28	38	37	40	44	51	61	67	67	69	46.
	Minimum	35	29	49	45	35	26	41	34	42	46	18	15	31	-9	12	15	16	30	5	28	35	27	18	26	22	25	36	40	53	33	46	29.2
Blandville	Maximum	53	56	62	67	64	52	54	60	59	50	40	38	36	21	20	28	31	41	33	48	62	58	36	41	42	48	50	58	69	65	70	48.
	Minimum	41	35	50	53	36	30	41	36	41	40	17	19	15	-2	12	15	18	28	15	31	37	21	18	31	22	27	37	28	55	37	32	29.
Calhoun	Maximum	54	49	61	62	62	53	50	58	56	54	40	35	38	22	16	25	29	37	34	47	61	61	41	39	41	45	52	54	68	64	68	47.
	Minimum	37	30	47	42	34	27	41	33	40	39	16	15	13	-3	16	15	15	15	8	28	34	23	16	27	21	23	36	33	52	35	48	27.
Earlington §§	Maximum	55	63	61	65	57	55	51	61	58	46	23	40	25	27	18	27	33	38	36	58	62	27	43	37	44	45	55	59	71	66	69	47.
	Minimum	28	30	39	45	55	27	28	42	41	45	20	15	22	-3	3	5	18	22	10	12	29	25	18	23	22	25	31	33	42	33	31	26.
Greenville	Maximum	52	51	62	65	65	52	51	60	59	52	41	36	39	19	17	25	33	38	33	47	62	61	41	36	41	46	54	56	69	63	70	48.
	Minimum	37	29	49	45	37	25	40	33	40	40	17	13	14	-6	10	15	17	29	5	29	34	24	17	28	20	26	32	38	53	35	45	28.1
Hopkinsville	Maximum	53	42	65	68	65	56	54	61	60	55	49	44	40	32	28	28	33	39	37	44	62	60	49	39	44	47	53	57	71	67	69	50.7
	Minimum	41	32	45	52	37	27	39	34	42	39	18	12	15	-6	13	16	20	29	8	30	37	26	20	31	25	27	38	40	55	38	52	30.1
Marion	Maximum	53	50	63	62	62	52	50	59	57	50	39	36	37	..	..	..	..	..	..	..	..	..	..	..	..	40	44	53	56	67	63	[l]52.
	Minimum	35	36	50	46	35	29	42	33	39	38	4	13	13	12	0	7	15	21	27	16	28	35	22	16	20	21	24	35	36	53	54	27.
Mayfield §§	Maximum	52	61	63	69	55	54	53	61	60	49	50	38	22	20	19	27	32	41	40	60	61	32	40	39	42	51	54	60	69	67	70	48.
	Minimum	24	33	40	52	54	27	29	40	40	40	12	13	21	-10	13	15	18	21	11	13	35	20	19	21	21	27	30	39	45	40	40	27.
Owensboro §§	Maximum	56	59	61	62	49	55	54	57	59	44	23	35	37	23	18	24	31	37	30	45	59	26	39	39	44	42	45	60	64	60	67	45.
	Minimum	37	30	34	40	46	28	38	34	36	40	17	17	20	-6	13	15	16	29	4	20	36	24	20	28	24	23	25	30	52	35	37	27.
Paducah (Lone Oak)	Maximum	55	55	64	68	70	71	68	60	60	60	44	40	41	25	21	27	31	39	40	49	63	63	39	40	42	41	60	59	70	68	72	51.
	Minimum	40	36	42	51	36	31	31	36	40	40	18	18	14	2	10	16	19	28	17	31	37	24	19	30	23	25	33	40	55	40	34	29.
Princeton	Maximum	..	..	63	67	62	55	50	60	59	51	41	28	35	20	18	27	37	40	34	45	62	45	41	38	42	44	53	57	69	65	70	[b]47
	Minimum	..	..	53	48	31	35	44	33	38	40	16	15	12	9	12	15	25	28	20	19	35	27	17	27	26	25	31	38	53	37	48	[b]29
Russellville §§	Maximum	61	63	58	56	54	54	56	60	50	36	36	33	21	27	25	35	35	36	49	50	28	41	35	39	47	52	56	66	65	66	..	[a]46.
	Minimum	30	49	48	56	20	..	..	..	..	..	..	30	8	9	12	14	19	4	10	33	26	19	27	24	27	27	37	39	35	48	19	[f]26.
Central Division																																	
Alpha	Maximum	50	55	63	64	56	52	49	55	57	56	49	33	40	25	23	20	40	34	34	43	63	59	47	40	40	48	46	57	69	67	64	48.
	Minimum	47	37	56	55	45	27	44	35	50	49	20	10	23	10	19	18	22	32	19	36	59	32	21	37	27	32	42	41	56	40	60	35.
Anchorage	Maximum	46	59	54	60	61	49	46	57	58	49	33	31	36	20	19	25	27	35	32	42	58	58	38	37	36	36	50	60	65	66	64	45.
	Minimum	31	31	32	32	34	22	36	26	36	32	13	9	10	15	2	10	5	20	-1	25	31	22	15	21	16	20	30	28	43	41	37	22.
Bardstown §§	Maximum	50	60	60	62	58	51	53	58	57	48	22	38	39	29	17	20	31	29	21	50	59	30	43	40	40	43	52	61	67	62	64	45.
	Minimum	33	31	34	40	52	25	25	31	33	43	16	14	16	-6	9	16	12	14	4	9	34	27	20	20	23	24	32	34	43	38	40	25.
Bowling Green §§	Maximum	52	61	65	67	59	53	55	60	55	50	40	25	25	21	17	22	34	38	34	52	60	29	44	40	44	51	57	59	70	71	36	46.
	Minimum	31	30	35	42	54	28	34	35	43	19	19	19	15	-2	7	14	18	21	2	2	20	28	20	27	24	26	32	38	43	36	36	25.
Edmonton	Maximum	19	58	64	65	66	50	55	60	57	55	41	35	38	39	18	23	36	35	32	35	64	64	44	45	44	49	50	55	70	65	64	49.
	Minimum	30	26	51	47	37	25	41	33	45	39	17	13	29	3	10	10	18	30	4	28	28	24	19	30	24	24	26	27	28	32	40	27.
Eubank §§	Maximum	48	60	63	63	58	49	52	56	55	49	45	35	35	33	31	25	35	32	35	44	63	39	45	38	40	48	44	60	68	..	..	[b]46.
	Minimum	21	28	31	44	51	23	23	28	32	45	18	4	9	2	2	12	14	18	9	14	33	32	20	20	23	24	29	37	41	34	40	24.
Frankfort	Maximum	47	47	56	60	61	46	49	55	55	51	40	30	38	33	16	25	28	34	33	41	58	59	38	48	38	37	52	57	64	62	67	46.
	Minimum	28	26	40	32	38	26	37	30	42	38	16	10	27	-6	6	14	9	25	1	21	30	25	19	24	22	23	29	34	45	34	37	25.
Franklin	Maximum	50	56	63	67	64	49	51	58	57	50	46	48	39	16	17	25	35	35	32	42	60	51	39	40	40	46	50	57	68	63	65	47.
	Minimum	37	33	53	52	36	28	38	33	42	37	17	16	13	2	9	13	17	17	11	28	34	22	20	32	24	36	27	42	53	40	45	29.
Greensburg §§	Maximum	51	62	65	65	58	52	53	61	58	49	22	39	33	21	17	19	34	34	21	51	62	31	43	39	42	45	52	61	69	61	65	46.
	Minimum	20	26	31	46	51	26	29	30	31	45	18	12	16	-5	-4	11	16	18	-2	0	29	29	19	20	23	24	27	42	43	34	84	23
Irvington	Maximum	49	50	60	64	64	49	49	57	54	52	35	35	39	20	16	25	31	35	30	44	61	61	37	36	38	40	52	56	66	57	65	46
	Minimum	38	32	44	44	34	27	40	32	43	35	17	17	17	-4	10	10	13	30	7	28	35	24	20	27	23	22	35	33	53	36	47	28.
Junction City	Maximum	48	55	62	60	62	49	55	58	56	50	39	30	37	32	14	23	31	34	34	42	59	58	40	37	40	42	46	58	66	61	68	46.
	Minimum	25	29	40	38	38	25	39	27	45	38	17	4	28	-9	5	13	13	27	-1	23	38	24	19	26	22	27	28	39	46	38	38	26.
Leitchfield	Maximum	50	51	60	62	61	50	50	59	56	51	38	35	36	17	15	27	35	36	33	44	58	52	40	37	39	47	52	56	67	58	66	46.
	Minimum	33	29	38	43	32	25	39	31	42	35	16	13	15	-11	9	13	15	29	0	26	33	24	18	25	20	24	32	38	52	34	45	26.
Lexington	Maximum	44	53	58	59	63	45	46	54	52	48	28	34	35	13	13	22	28	31	30	38	57	52	36	39	35	46	48	57	63	56	65	43
	Minimum	37	31	44	44	30	27	34	32	43	28	10	10	10	4	6	12	14	20	14	30	36	21	20	30	23	22	34	38	49	40	37	26
Loretto	Maximum	48	52	61	67	63	49	53	58	55	52	37	30	39	26	6	25	29	37	35	41	51	60	41	43	40	42	61	64	69	..	..	[b]46.
	Minimum	26	21	42	37	33	24	41	27	42	35	15	10	10	-6	4	13	10	-7	26	25	31	25	16	23	21	25	27	39	50	20	21	23
Louisville	Maximum	48	53	54	60	63	48	46	56	53	52	26	38	36	16	19	24	29	36	30	43	60	19	37	38	38	38	51	57	64	53	64	41.
	Minimum	35	34	42	38	33	30	36	34	43	26	15	16	10	5	12	16	14	23	14	29	36	23	21	31	25	21	33	33	51	35	32	27.
Do. (Cherokee Park)	Maximum	47	45	54	59	62	47	47	56	54	51	39	32	37	19	16	23	27	36	33	42	58	58	36	37	37	37	51	57	65	62	65	44.
	Minimum	32	29	41	34	33	25	39	29	40	37	15	13	17	-8	8	14	9	25	4	24	33	23	17	25	22	20	29	30	50	34	35	25.
St. John §§	Maximum	50	69	60	61	59	49	54	58	56	46	23	39	32	13	15	25	30	35	35	49	60	27	40	36	40	40	52	58	67	58	65	45.
	Minimum	19	27	33	40	52	25	25	30	31	42	11	13	11	-14	-16	10	12	15	-5	-2	33	25	18	19	20	20	23	31	36	31	38	21.
Scott	Maximum	47	40	56	53	60	45	46	53	51	47	33	24	33	20	14	31	22	34	30	43	61	61	36	36	37	35	50	54	61	56	66	43.
	Minimum	29	30	36	31	36	25	36	28	41	33	10	3	20	-6	5	14	6	22	8	19	32	22	32	28	18	14	26	30	42	38	36	24
Shelbyville §§	Maximum	48	50	55	61	57	39	40	42	46	45	20	31	32	15	17	22	30	33	34	37	53	30	33	35	36	39	38	55	64	55	63	40
	Minimum	18	28	28	37	48	24	25	28	31	38	15	9	14	-10	9	10	7	12	1	2	32	24	18	22	20	21	22	31	37	31	32	21
Taylorsville	Maximum	47	47	59	60	61	46	49	56	54	50	40	31	39	20	18	25	28	34	29	41	57	60	36	37	38	37	52	57	65	55	65	44
	Minimum	27	24	44	33	35	25	39	29	39	40	15	12	20	-17	1	15	7	22	-8	20	30	25	19	23	20	23	29	30	47	32	38	23
Williamstown §§	Maximum	47	52	55	60	56	47	32	55	52	45	24	35	32	20	18	22	24	25	32	45	57	26	42	36	39	35	48	57	64	53	66	42
	Minimum	24	33	34	35	39	25	25	29	29	45	13	6	8	-4	-3	9	7	11	9	8	31	24	18	19	20	18	18	32	35	37	36	21
Eastern Division																																	
Beattyville §§	Maximum	49	60	65	61	61	53	57	61	61	53	22	31	36	21	17	21	31	35	40	50	66	32	51	40	44	48	48	65	74	64	74	48
	Minimum	16	27	30	35	48	28	29	22	29	31	21	4	6	11	9	14	16	17	9	10	36	31	18	19	21	23	25	26	31	37	32	22
Berea	Maximum	48	60	65	68	66	53	56	59	59	53	50	45	44	33	16	22	32	35	36	38	59	59	56	56	47	45	49	61	67	67	70	50
	Minimum	28	31	48	38	39	25	39	28	46	38	12	4	29	1	4	14	12	23	5	24	20	25	23	24	24	29	28	31	49	38	45	26
Farmers	Maximum	47	56	66	61	62	52	52	62	57	63	58	32	37	37	16	29	29	33	37	46	58	67	58	40	39	38	50	63	62	64	67	49
	Minimum	22	25	36	29	42	25	31	24	47	37	16	-3	25	7	3	-4	-1	11	4	13	26	27	19	23	29	25	25	35	38	39	34	22
Maysville §§	Maximum	46	50	56	62	52	48	54	56	54	42	24	35	34	20	18	27	30	37	35	43	55	32	41	37	34	33	50	59	64	54	70	43
	Minimum	14	32	33	28	33	26	25	26	28	39	17	5	5	3	-3	8	2	5	2	2	27	32	12	16	26	22	22	30	33	40	33	20
Middlesboro	Maximum	56	59	65	64	64	60	54	56	54	55	59	34	41	28	30	34	41	44	40	40	63	64	47	52	51	52	48	57	70	65	66	52
	Minimum	32	33	46	48	49	29	29	31	46	42	22	7	25	15	18	21	25	34	27	32	35	34	21	31	30	24	24	37	50	37	42	41
Mount Sterling §§	Maximum	41	57	56	64	61	45	50	58	55	41	19	34	32	16	15	19	31	32	34	44	52	30	40	55	37	41	48	58	65	57	69	43
	Minimum	22	31	32	35	49	26	28	27	30	40	16	2	8	6	-3	10	11	15	3	15	29	30	19	20	23	24	24	38	42	42	36	23
Richmond §§	Maximum	46	58	61	64	58	48	52	68	55	53	34	35	32	12	17	31	34	38	34	45	55	37	40	40	39	42	47	61	72	54	70	46
	Minimum	35	30	48	42	51	28	32	31	42	42	16	9	28	2	5	10	12	29	10	28	35	30	20	24	20	25	36	40	46	40	48	28
Weeksbury	Maximum	60	64	66	64	60	51	57	60	60	58	45	45	50	30	31	33	40	37	47	56	69	38	40	46	51	45	52	65	69	72	67	52
	Minimum	27	15	35	10	41	34	35	30	11	40	20	10	14	16	15	17	21	30	31	34	40	24	27	30	32	23	30	34	33	37	38	28
Williamsburg §§	Maximum	64	62	64	66	62	63	51	41	38	40	39	43	42	35	35	35	43	40	40	50	67	40	50	46	45	51	58	62	71	68	71	51
	Minimum	31	37	40	43	52	28	28	29	18	11	15	21	30	10	18	18	19	22	21	21	28	32	21	21	31	31	28	31	47	40	48	28

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
8
6
4
2
1
0.5

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CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

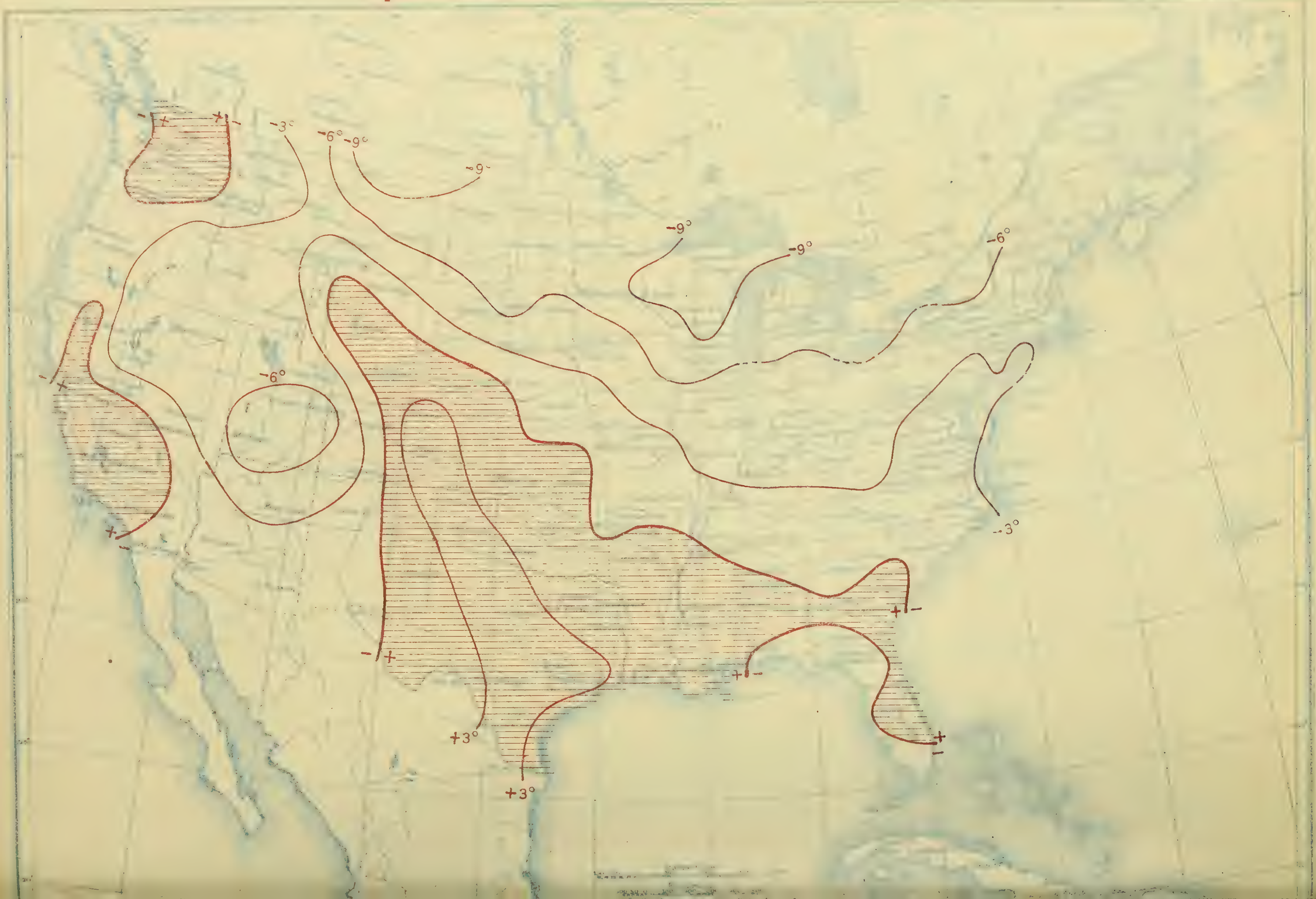
KENTUCKY SECTION

FEBRUARY, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 20, 1917

Departure of the Mean Temperature from the Normal, February, 1917.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XXII. LOUISVILLE, KY., FEBRUARY, 1917. No. 2.

GENERAL SUMMARY.

A sharp cold wave was in progress as the month opened, and ien followed two weeks of severe weather during which time iere occurred several other cold waves and one blizzard. Durng the blizzard, on the 4th, the temperature fell from about 0° to near zero in about 8 hours, with a wind that reached a elocity of 60 miles per hour which carried with it a blinding torm of snow and ice particles. This storm was particularly estructive to wheat, killing the part of the plant which was bove ground. Snowfall was light during the first half of the nonth and afforded but little protection to grain, which suffered reatly. During the last half of the month temperatures were nuch above normal. Thunderstorms occurred generally on the 0th, 23d and 28th. A heavy fall of moist snow the night of ie 27-28th over the central and northern counties caused conderable damage to telephone, telegraph and lighting systems. his snowstorm was accompanied in many places by thunder nd lightning, an unusual phenomenon for this section. Liveock interersts suffered considerable loss, especially in young ambs, from the severe weather of the first two weeks and the eavy snow of the 28th. The total snowfall for December, 916, and January and February, 1917, at Louisville was 31.7 nches, being second only to the record snowfall of 37.4 inches or the same months in 1894-5.

PRESSURE.

Eight distinctive low pressure formations and five distinctive igh pressure formations moved across the central valleys and ake region during the month and affected weather conditions ver the State. Lows occurred as follows: (1) A deep trough f low (with center over the Lake region) swept over the Ohio alley on the 4th, attended by snow and a severe blizzard. The mperature fell from above freezing to zero in a few hours; (2) deep trough of low pressure similar in many ways to No. 1, wept across the upper Mississippi and Ohio valleys and the ake region during the 7-8th, attended by snow and followed y a sharp cold wave. (3) A low of moderate energy moved rom the lower Mississippi valley over Tennessee and the Ohio alley the 14-15th. (4) A deep trough of low pressure swept cross the central valleys and Lake region the 17th, attended by igh temperature and high wind, but little or no precipitation. 5) A well-defined, oval-shaped low passed from the lower lissouri-central Mississippi Valley to the Appalachian and tlantic states during the 19-20th, and (6) was followed by nother trough of low which swept across the central valleys nd Lake region during the 21st. (7) A deep trough of low ressure swept across the central valleys and Lake region on the 3d, attended by thunderstorms and high temperature followed y a sharp reaction to colder; and (8) was followed by a similar rough during the 25-26th which was attended by high temprature and high wind, but no precipitation.

High pressure areas, mostly attended by cold weather, obined in the periods 1st-3d, 5-6th, 9-14th, 22d, and 24th. uring the 27-28th, high pressure to the north and low pressure the south caused deep and unusually moist snow over central nd northern Kentucky.

The mean sea-level pressure, based on the reports of two tations, was 30.12 inches. The extremes were 30.80 at Louisille on the 12th, and 29.49 at Lexington on the 4th.

TEMPERATURE.

The average temperature for the month, as determined from the reports of 41 stations, was 34.8°, which is only slightly below normal. Minimum temperatures near zero or below were registered generally over the State on the 2d, 3d, 4th, 5th, and in the central and eastern counties on the 10th, 11th and 12th, the minimum for the State being −9° at Farmers on the 5th. Maximum temperatures in the 60's occurred daily from the 16th to 27th, and in the 70's on several days. At Russellville the temperature reached 80° on the 26th, which was the highest for the State.

PRECIPITATION.

The average precipitation for the State, based on the records of 55 stations, was 3.51 inches, which is 0.23 inch below normal. There was a marked deficiency in the northern and western counties, where monthly amounts ranged between 1.6 and 3 inches. Over the south-central and southeastern counties, precipitation, generally in excess of normal, ranged in amount between 4 and 8 inches. Amounts at the various stations ranged between 1.62 inches at Scott and 8.20 inches at Alpha. Precipitation was light and scattered during the first half of the month; but was moderately heavy and general on the 15th, 19th, and 23d, and heavy on the 27-28th, almost half the monthly amount occurring on the latter date. Snowfall was light over the southern half of the State, but ranged between 6 and 16 inches over the northern counties. The heavy snows were of but little benefit to grain, as they quickly melted.

WIND.

The total wind movement at Louisville was 10,931 miles, and at Lexington 11,447 miles, with average hourly velocities of 16.3 and 17.0 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 60 miles per hour on the 4th at both stations—from the west at Louisville and southwest at Lexington.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 or more.
1889	34.1	− 1.3	74	3	1.91	−1.83	
1890	45.6	+10.2	86	16	7.98	+4.24	
1891	42.2	+ 6.8	76	0	4.72	+0.98	
1892	42.2	+ 6.8	70	11	2.92	−0.82	
1893	37.7	+ 2.3	70	3	4.40	+0.66	
1894	34.6	− 0.8	74	2	4.66	+0.92	
1895	25.9	− 9.5	80	−18	0.66	−3.08	5
1896	37.4	+ 2.0	81	−12	3.06	−0.68	9
1897	39.8	+ 4.4	76	8	5.75	+2.01	11
1898	37.4	+ 2.0	77	− 3	1.61	−2.13	6
1899	26.2	− 9.2	71	−23	3.97	+0.23	11
1900	32.5	− 2.9	76	− 9	4.68	+0.94	12
1901	32.4	− 3.0	71	1	1.27	−2.47	6
1902	27.9	− 7.5	69	3	1.30	−2.44	7
1903	37.5	+ 2.1	75	−16	7.28	+3.54	9
1904	35.2	− 0.2	75	− 2	2.32	−1.42	7
1905	27.9	− 7.5	67	−16	2.44	−1.30	9
1906	34.7	− 0.7	75	12	1.81	−1.93	7
1907	35.7	+ 0.3	73	−10	3.06	−0.68	9
1908	35.6	+ 0.2	70	2	5.56	+1.82	13
1909	42.4	+ 7.0	75	− 8	8.17	+4.43	11
1910	32.9	− 2.5	66	−12	4.70	+0.96	10
1911	42.0	+ 6.6	80	11	3.25	−0.49	9
1912	29.7	− 5.7	68	−14	3.08	−0.66	7
1913	34.8	− 0.6	77	− 2	2.94	−0.80	7
1914	32.2	− 3.2	59	2	4.14	+0.40	11
1915	41.9	+ 6.5	75	13	1.74	−2.00	8
1916	35.0	− 0.4	72	4	2.99	−0.75	9
1917	34.8	− 0.6	80	9	3.51	−0.23	8

Climatological data for Febuary, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	14	35.6	+1.2	76	25	1	2	46	2.15	-1.67	0.90	3.0	8	10	9	9	sw.	W. T. Austin.
Blandville	Ballard	445	35	36.2	-0.2	76	26	-3	2	40	2.75	-2.01	1.01	0.7	5	11	10	7	sw.	E. W. Horr.
Calhoun	McLean	437	13	36.3	0.3	75	26	4	2	53	2.38	-1.44	1.28	4.1	4	4	16	8	nw.	W. A. Taylor.
Earlington	Hopkins	420	26	34.6	-1.8	75	25†	-3	2	45	2.58	-1.42	1.22	2.5	5	14	0	14	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	e33.3		70	27	-2	2	48	3.06		1.13	2.6	7					C. R. Lovell.
Hopkinsville	Christian	524	20	40.1	+3.1	77	26	0	2	52	4.05	+0.16	1.80	1.8	8	10	7	11	w.	W. F. Randle.
Marion	Crittenden	571	18	36.2	+0.5	75	26	5	2	40	1.77	-1.60	0.98	T.	3	6	9	13	n.	B. C. Paris.
Mayfield	Graves	364	7	35.0		75	27	-2	3	41	2.00		1.60		2					J. N. Davis.
Owensboro	Daviess	479	20	33.9	-0.8	74	25	-2	2	42	2.40	-0.85	1.10	4.5	6	10	9	9	nw.	Henry S. Berry.
Paducah	McCracken	341	17	40.3	+4.3	77	26	3	2	60	2.51	-1.19	0.94	T.	5	14	0	14	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	40.0	+5.5	76	26	5	3	44	2.90	-1.53	1.50	T.	3	12	14	2	sw.	Dr. J. A. H. Miller.
Russellville	Logan	590	5	34.3		80	26	-2	3	46	3.04		1.66		6	13	8	7		E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	37.9	-0.6	72	25	-3	3	40	8.20	+3.70	3.95	4.5	8	8	2	18	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	31.8	-0.3	71	26	-5	5	40	2.18	-0.96	1.12	13.5	6	11	12	5	sw.	C. E. Barret.
Bardstown	Nelson	637	20	32.9	-1.6	75	25	-2	5	44	2.85	-1.06	1.01	9.2	9	9	9	10	nw.	Chas. M. Talbott.
Bowling Green	Warren	500	26	37.0	-0.2	78	26	0	3	41	5.16	+1.01	1.80	T.	8	14	10	4	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson										4.07		1.98	2.0	9					James H. Young.
Burnside	Pulaski	773	24								6.01	+1.75	1.62	0.5	10					C. L. Hurt.
Carrollton	Carroll										2.08		0.60		9					Charlie Oliver.
Cloverport	Breckenridge	375	3								2.01		0.60	6.9	11					W. A. Cockerill.
Edmonton	Metcalfe	600	23	38.6	+2.2	76	25	0	2†	47	3.68	-0.73	1.15	0.4	9	3	12	13	s.	P. W. Ray.
Eubank	Pulaski	1177	22	c33.6	+0.3	74	26	-6	12	42	4.68	+0.59	1.25	1.9	8	5	5	18	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	34.6	-0.2	74	26	-5	5	44	2.66	-0.90	1.10	7.7	12	8	8	12	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	37.2	1.4	76	26	1	2	38	4.04	-0.85	1.40	1.0	10	5	16	7	sw.	J. E. Newman.
Greensburg	Green	581	24	34.0	+0.3	76	26	0	3†	44	4.60	+0.47	1.70	1.0	9	6	6	16	w.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14								2.91	-0.55	1.35	3.2	10					Miss Lulu Wood.
Irvington	Breckenridge	646	19	35.0	+0.7	74	26	4	2	37	2.47	-0.86	1.10	7.5	4	10	4	14	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	35.2	+2.1	74	26	-3	5	44	5.86	+2.23	2.10	6.0	10	10	6	12	sw.	H. F. Ewing.
Leitchfield	Grayson	635	21	34.7	+0.7	75	26	-3	2	39	3.07	-0.71	1.78	3.4	8	9	10	9	sw.	John E. Stone.
Lexington	Fayette	989	29	31.8	-3.8	71	26	-7	5	40	2.12	-1.11	0.79	7.4	11	7	8	13	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18			75	25†	-2	5		4.58	+1.53	1.70	7.0	11	12	9	7		Loretto Academy.
LOUISVILLE	Jefferson	525	44	32.2	4.4	73	26	-4	2†	40	2.55	-1.20	1.41	12.1	7	8	7	13	n.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	7	34.4		73	26	-5	5	39	2.77		1.40	10.0	7	9	10	9	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	31.6	1.4	74	26	2	5	43	3.14	-0.74	1.55	5.0	10	21	2	5		Sisters of Loretto.
Scott	Kenton	900	19	32.0	+1.3	70	26	-8	5	36	1.62	-1.13	0.79	6.3	8	8	11	9	w.	E. B. Wilson.
Shelbyville	Shelby	825	28	29.2	-4.8	73	26	-5	5	38	2.91	-0.69	1.25	16.2	9	14	4	10	ne.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	34.6	+0.2	75	26	-3	5	45	2.67	-1.10	1.25	7.7	10	9	5	14	nw.	E. D. Bourne.
Williamstown	Grant	943	14	30.1	-0.9	71	26	-7	5	42	2.17	-0.80	0.70	9.5	9	7	12	9		Miss Rose Carter.
Woodbury	Butler										3.35		1.50	T.	6					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	33.8	-0.1	77	26	-2	5	48	4.90	+0.80	1.30	4.5	11	9	5	11	w.	A. H. Bowman.
Berea	Madison	1070	15	34.8	-1.0	75	26	-3	5	42	3.97	+0.80	1.63	5.0	9	11	4	13	sw.	C. F. Rumold.
Catlettsburg	Boyd	534	28								2.90	-1.00	1.05	6.2	9					Mrs. Mertie M. Bruns.
Falmouth	Pendleton	600	28								2.58	-0.66	0.92	9.0	9	4	9	15	s.	J. V. Oldham.
Farmers	Rowan	668	9	34.2	-1.4	78	26	-9	5	51	4.28	+1.11	1.81	7.5	9	11	1	16	w.	Durwood Cassity.
Hazard	Perry		1																	
Jackson	Breathitt	776	5								6.38		2.00	6.7	8					Jas. L. McCoy.
London	Laurel	1190	2								5.98		1.44	1.0	13					C. R. Lee.
Louisa	Lawrence	584	13								3.71	+0.06	1.13	3.8	6					F. C. Sammons
Manchester	Clay	1400	7								3.66	+0.72	0.89	2.0	9					Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	31.5	-1.5	72	26	8	5	43	2.61	-0.72	0.80	8.7	9	12	9	7	nw.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	36.4	-2.5	69	26	-1	4	39	4.28	-0.64	1.08	1.0	10	7	16	5		B. H. Perkins.
Mount Sterling	Montgomery	930	27	31.0	-2.3	75	26	6	5	39	3.52	-0.75	1.31	10.5	11	9	6	13	sw.	W. R. McKee.
Pikeville	Pike	634	11								4.88	+1.37	1.26	5.0	10					I. M. Williams.
Richmond	Madison	926	23	34.3	0.6	70	26	0	2	40	3.95	+0.31	1.55	7.9	11	11	5	12	w.	J. W. Crooke.
Weeksbury	Floyd	1216	3	37.4		76	26	-3	5	51	4.81		2.20	5.0	6	12	6	10		O. A. Lund.
Williamsburg	Whitley	939	19	37.7	+0.2	75	26	0	3†	46	4.49	+1.00	1.97	1.0	11	6	6	16	s.	N. C. Jones.
State averages and extremes				34.8		80	26	-9	5	60	3.51		3.95	4.7	8	9	8	11	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ‡‡ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡‡ Post-office address, Nerinx, Ky.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 77 per cent, at 2 p. m. 53 per cent, and at 7 p. m. 59 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 51 and at Lexington 33.

MISCELLANEOUS.

February 4.—Wires were blown down in many places; travel was impeded by the wind and blinding snowstorm; and great suffering resulted from the blizzard. Also two buildings we blown down near Whitesburg.

February 27.—During a heavy snowstorm lightning stru and destroyed a church near Williamstown.

Rivers.—Good stages obtained in the Ohio on the 1st, but th declined practically to pool stage by the 17th. The gene rains and melting snows caused a rise that began about the 20 and continued until the 28th. Navigation was impeded by i from the 10th to 17th.

Daily Precipitation for February, 1917.

STATIONS		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Western Division.																														
ver Dam	G	.04			.05					.02						.25				.40				.65				.50	[illegible]	[illegible]
ndville	M	T	T		.02	T								T.	.03	.70				.68				.01				T.	1.01	[illegible]
oun	G	T	T		T	T			T	T					T	.43				.74				.13				T	[illegible]	[illegible]
lington ‡	G.	|....				.22										.20				.75				.19					1.22	2.58
enville	G.	.21		.03												.70				.18				.01				[illegible]	[illegible]	[illegible]
kinsville	C				.10	.08										1.08				.11			.40		.15			.40	1.40	4.05
ton	O		T													.45				.34									[illegible]	1.77
field	M																			.40								1.60		[illegible]
ensboro	O	.30	T	T		T				T.						.35			.01	2.5	T.			.36	T				1.10	[illegible]
ucah	O		T	T	T											.64				.69				.20	.01			T.	.94	[illegible]
eeton	G.	T							T						T	.70				.70				T	T			T.	1.50	2.90
sellville	G														.02	.72				.51	.11				.02				1.66	3.04
Central Division.																														
ha	C	T	.65	.40					T						T	1.10		.30		.90	1.05			3.95				.45		[illegible]
horage	O	T			.04				.02							.23			.15					.62				T.	1.12	[illegible]
dstown	S	.35				.20				.02						.40			.25	.10	.05			.17					[illegible]	2.85
ling Green	G		.40			.20				.05						.15				1.65				.38	.53				1.80	5.16
wnsville	G		.41				.20										.66	.01		.37	.14	T.		.28	.02				1.98	4.07
nside	C.	1.20	T			.05			.08	.10					T	.84	T		.20	.40	1.62			T	.90				.62	6.01
oulton	O					.11				.06						.03				.05	.06			.60	.29			.32	.56	[illegible]
verport	O.	.24	.04	T.		.04				.02						.36	.03		.03	.17	.01			.47	T				.60	2.01
nonton	G				.04	T										.90		.03		1.15	.41		.32	.27				.10	.46	3.68
ank	C.	.53				.06				.06	.04					.65				.50	1.07				1.25				.52	4.68
nkfort	K	.16	.02	T.		.04	T			.07	T				T	.38	.05			.11	.03			.42	.25			.03	1.10	2.66
nklin	G	.25	T.		.15	T			.03	.95					.05					1.40	.28			.18				.15	.60	4.04
ensburg	G	.36	T			.10				T	T					.95	T		.02	.36	.38			.36	.37				1.70	4.60
h Bridge	K.	.10	T.			.10	T.			.05						.68	.02			.03	.06			.40	.12				1.35	2.91
ngton	O.	T	T		T.				T							.47			T	.33				.57				T	1.10	2.47
ction City	K	.37			.20					.10						1.03			.18	.47				1.07	.19			.15	2.10	5.86
chfield	G	.02			.10					.03						.60				.31				.23				1.00	.78	3.07
ington ***	K	.01	.01		.20	T			.04	T.				T	.05	.52			.02	.07				.41				.49	.30	2.12
etto	S				.20				.10							1.30		.01	.01	.01	.20			.60	.05			.40	1.70	3.65
isville***	O	T.	T		.02	T			T	T				T	T	.23			.09	.06				.74			T	.24	1.17	[illegible]
o (Cherokee Park)	O	T			.10					.10						.30			.14	.05				.68					1.40	2.77
John	S	.35	.01			.04				.01					T		.65		.01	.12	.07			.30					1.55	3.14
tt	L	T	.01		.09	T			T	.06	T						T		.01	.08				.79				.14	.44	1.62
Daville	S	.15	T.			.02				.03						.32	.02			.25	T			.65	.22			T.	1.25	2.91
lorsville	S	.16	T.		.12	.01				.04	T					.43			.01	.06				.51				.08	1.25	2.67
iamstown	L		.05			.06				.03					T	.11	T			.11				.44	.35			.32	.70	2.17
odbury	G	.39	T	T		T				T.						.57	T.		.20		.22			.47					1.50	3.35
Eastern Division.																														
ttyville ‡	K.	.37	.04			.20				.20						.70	.06			.15	.95				1.30			.03	.90	4.90
a	K	T	.02		.10	T.				.18						.32	.12		T	.42				.95				.23	1.63	3.97
ettsburg	B.	.20				.02				.06						.28	.17			.20					1.05			.41	.51	2.90
mouth	L	T	.02			.02				.05						.18	T.			.25				.55	.21			.38	.92	2.58
mers	L	.36				.05				.22						.68				.12				.23	.72			.09	1.81	4.28
ard	K.																													....
kson	K	1.09	T.			.20			T.	.10	T.				T	.84	.10			T.	1.10				2.00			T.	.95	6.38
don ‡	C.	.60	.20			.03			.09	.10						1.00	.20		.25	.10	1.44				1.30			.40	.27	5.98
sa	B.	.56				.08											.30				.56				1.13				1.08	3.71
chester ‡	K	.87				.20										.61	.03			.02	.60		.02		.89				.42	3.66
rsville ‡	O.	T	T.			.09	T	T		.16	T				T.	.18	.12			.07				.13	.80			.41	.65	2.61
llesboro	C				.10					.18						.54		.05	.09	.34	1.08			.24	1.06				.60	4.28
unt Sterling	L	.38	.03			.20				.11	T				T.	.54	.06			.12	.07			.60	.10				1.31	3.52
eville	B	.62	.14			.32	T			.22	T					.54	.18			.08	1.06				1.26				.46	4.88
mond	K	.31	.04	T		.18				.12						.71				.20	.30			.20	.30			.05	1.55	3.96
ksbury	B	T.	.30							.20					1.33					.58								.20	2.20	4.81
liamsburg	C.	.45	T.		.05				.02	.05						.25	.15		.15	.10	1.97				.90				.40	4.49

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24 hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

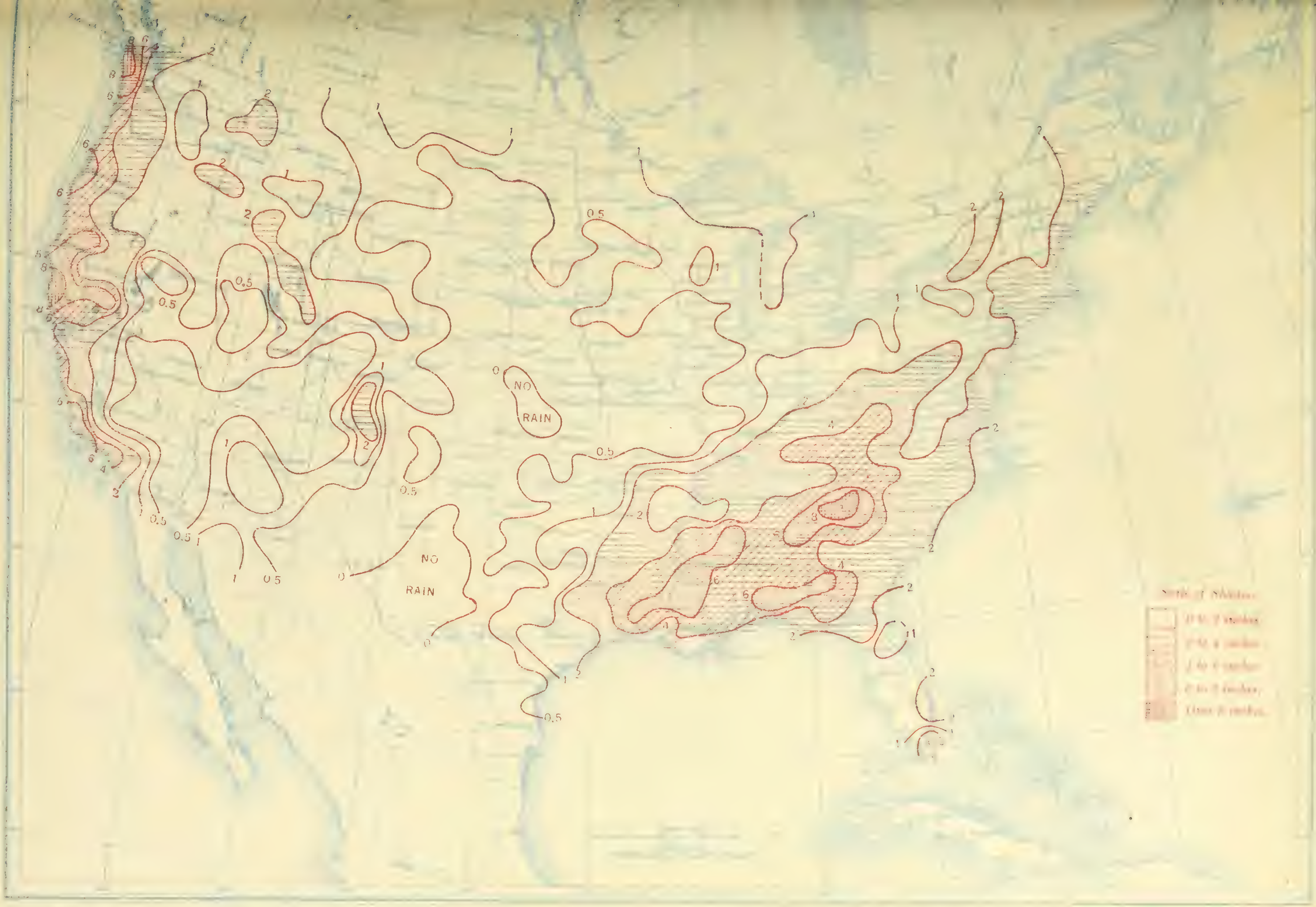
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt, (G) Green; (C) Cumberland (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for February, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	22	7	30	39	16	37	50	50	25	37	24	30	48	41	37	53	58	46	64	55	67	66	69	59	76	75	40	40	..	..	..	45.1
	Minimum	22	1	2	21	2	5	33	35	9	15	14	10	18	33	30	29	45	45	39	31	33	27	49	32	30	56	38	32	..	..	..	26.1
Blandville	Maximum	32	12	32	40	24	40	52	50	29	43	23	30	47	47	41	56	62	52	60	53	68	63	71	48	71	76	61	39	..	..	..	47.2
	Minimum	10	3	5	8	5	16	34	29	10	19	14	8	22	36	28	33	40	34	36	29	31	33	40	29	31	61	35	34	..	..	..	25.2
Calhoun	Maximum	67	15	29	39	15	35	70	48	35	38	36	30	47	46	43	53	59	55	62	61	68	63	69	53	71	75	72	38	..	..	..	49.0
	Minimum	14	1	2	3	1	7	32	34	6	12	9	8	16	33	28	29	39	37	35	27	31	27	50	29	31	61	33	31	..	..	..	23.6
Earlington §§	Maximum	18	9	38	10	22	38	53	51	39	40	22	33	49	45	38	56	60	51	62	56	71	61	70	53	75	75	40	38	..	..	..	45.5
	Minimum	17	3	-2	10	3	5	22	38	10	10	14	14	14	26	30	31	35	39	37	31	31	27	40	31	30	54	35	33	..	..	..	23.6
Greenville	Maximum	62	15	30	39	18	37	51	52	34	38	34	28	48	45	39	55	57	53	65	57	69	..	..	..	..	..	70	41	..	..	..	^{e}45.1
	Minimum	14	-2	2	5	2	5	34	31	10	13	13	10	16	34	29	30	40	39	38	30	32	..	..	..	..	..	35	32	..	..	..	^{e}21.5
Hopkinsville	Maximum	62	37	32	40	32	36	51	54	39	43	39	33	51	49	45	57	55	52	65	61	71	64	72	67	73	77	72	49	..	..	..	52.
	Minimum	10	0	5	7	4	9	33	36	11	18	16	10	21	36	31	31	38	42	39	34	35	31	52	35	51	61	35	35	..	..	..	27.4
Marion	Maximum	47	34	30	38	22	35	49	48	35	40	37	31	47	45	42	53	60	58	60	54	50	67	67	50	71	75	70	48	..	..	..	48.7
	Minimum	12	-5	1	5	2	13	33	34	8	4	11	6	19	34	28	30	40	35	34	28	25	29	49	29	31	61	34	31	..	..	..	23.6
Mayfield §§	Maximum	19	19	34	39	25	40	50	52	30	42	39	32	50	41	41	55	61	47	64	58	69	64	71	50	72	75	39	44	..	..	..	47.
	Minimum	15	0	-2	10	6	7	19	33	12	13	12	11	11	28	29	29	37	38	37	30	30	22	37	29	31	35	36	34	..	..	..	22.
Owensboro §§	Maximum	19	7	39	25	15	36	47	45	20	35	22	39	46	47	46	50	59	48	59	50	66	60	67	47	74	73	40	38	..	..	..	43.
	Minimum	18	-2	5	20	2	9	31	33	6	15	10	9	19	33	29	29	35	35	35	30	31	29	48	30	32	45	33	32	..	..	..	24.
Paducah (Lone Oak)	Maximum	72	10	33	37	25	40	51	49	39	44	49	57	49	46	47	56	63	64	61	62	69	64	71	56	73	77	76	42	..	..	..	52.
	Minimum	12	-3	5	8	5	17	33	35	11	18	22	30	31	12	29	33	41	35	36	30	32	33	46	30	32	62	36	34	..	..	..	27.
Princeton	Maximum	56	18	32	38	36	35	49	50	36	35	30	31	50	47	39	55	59	57	63	60	69	66	70	55	74	76	72	69	..	..	..	51.
	Minimum	15	7	5	12	10	11	33	35	16	18	20	20	14	20	35	31	36	41	53	31	34	34	49	31	30	62	69	40	..	..	..	29.
Russellville §§	Maximum	19	9	33	38	17	35	46	52	23	36	26	31	51	43	34	52	55	54	64	60	62	69	71	52	77	80	41	50	..	..	..	45.
	Minimum	19	1	-2	9	2	9	11	34	12	12	6	9	10	18	32	30	33	42	40	36	35	28	38	36	31	40	38	35	..	..	..	22.
Central Division																																	
Alpha	Maximum	30	20	23	37	14	33	45	43	40	33	30	31	48	43	39	47	55	63	67	62	68	59	66	55	72	71	53	42	..	..	..	46.
	Minimum	20	4	-3	4	2	14	35	40	15	18	20	12	17	37	32	31	45	58	53	42	42	32	55	44	32	49	47	37	..	..	..	29
Anchorage	Maximum	46	13	23	37	9	36	46	46	27	30	27	23	43	47	38	43	49	45	65	49	65	47	66	56	70	71	62	39	..	..	..	43.
	Minimum	13	-3	1	-1	-5	3	27	27	6	2	3	3	11	32	26	26	27	32	33	28	28	21	46	31	30	56	32	31	..	..	..	20
Bardstown §§	Maximum	26	4	25	41	14	36	49	52	18	33	23	33	43	42	42	50	59	46	68	63	68	62	68	58	75	53	41	40	..	..	..	44.
	Minimum	26	2	1	10	-2	8	9	35	9	9	2	9	21	26	29	28	28	39	38	24	33	28	30	31	31	36	38	32	..	..	..	21
Bowling Green §§	Maximum	22	4	32	42	14	38	50	53	26	32	22	39	39	43	55	57	60	63	65	62	70	66	73	70	70	78	43	51	..	..	..	47.
	Minimum	21	1	0	6	3	4	9	36	8	12	15	11	15	22	32	30	36	42	44	46	37	30	45	46	52	48	43	36	..	..	..	26
Edmonton	Maximum	63	17	25	41	12	35	49	47	45	35	35	29	51	47	44	53	59	69	70	61	69	71	70	73	76	75	75	49	..	..	..	51.
	Minimum	16	0	0	5	1	2	31	36	12	9	14	9	16	36	30	30	35	45	43	41	34	28	39	28	57	49	37	37	..	..	..	25
Eubank §§	Maximum	..	..	..	..	..	36	49	44	17	30	27	26	47	42	35	49	39	64	61	60	..	62	67	50	70	74	45	36	..	..	..	^{f}46
	Minimum	28	0	-2	0	-2	0	13	35	11	-5	10	-6	12	16	33	29	28	30	43	37	33	..	27	38	28	32	44	34	..	..	..	^{a}26.
Frankfort	Maximum	62	19	23	38	10	32	46	50	44	31	31	20	44	47	43	45	59	50	66	62	63	61	67	63	68	74	72	39	..	..	..	47.
	Minimum	18	-1	0	1	-5	6	28	28	7	6	8	4	12	32	26	28	28	31	35	33	31	27	37	33	28	56	34	31	..	..	..	21.
Franklin	Maximum	48	19	27	40	17	35	48	51	35	39	37	28	50	43	40	52	55	63	69	56	66	60	64	70	68	76	66	47	..	..	..	48.
	Minimum	13	1	3	4	2	11	30	32	12	14	15	9	18	36	30	30	37	45	42	37	37	30	38	32	34	52	35	35	..	..	..	25.
Greensburg §§	Maximum	26	9	32	40	13	36	50	50	21	35	17	28	50	43	39	52	59	63	64	60	69	61	71	52	72	76	42	49	..	..	..	45.
	Minimum	25	2	0	4	0	2	10	34	12	9	12	9	10	18	32	30	33	42	44	32	32	27	35	37	28	32	40	34	..	..	..	22
Irvington	Maximum	52	15	26	35	13	35	46	46	25	34	32	26	46	46	42	48	59	48	63	56	65	60	68	64	69	74	69	37	..	..	..	46
	Minimum	15	-4	2	2	-2	7	32	25	8	11	11	7	16	34	28	30	37	36	34	32	32	30	50	32	32	59	35	32	..	..	..	23
Junction City	Maximum	50	20	22	38	10	32	48	49	45	30	30	23	47	45	42	50	59	49	62	62	67	62	67	60	71	74	69	41	..	..	..	47
	Minimum	18	0	-2	1	-3	3	30	37	7	2	7	5	12	33	27	30	36	42	40	35	31	28	42	35	27	54	36	32	..	..	..	23
Leitchfield	Maximum	50	12	26	35	12	35	48	52	30	36	26	26	47	44	40	52	57	50	64	55	68	60	69	50	69	75	65	39	..	..	..	46.
	Minimum	13	-3	0	2	-1	5	29	32	6	8	12	8	16	33	28	28	38	39	37	32	34	28	47	32	30	58	32	31	..	..	..	23
Lexington	Maximum	37	9	24	35	8	31	44	46	23	28	22	18	42	45	35	44	58	47	63	51	64	57	66	46	68	71	57	35	..	..	..	42
	Minimum	9	4	2	-4	-7	7	30	23	6	8	6	2	14	34	25	29	38	36	38	33	32	31	42	32	32	54	32	31	..	..	..	21
Loretto	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	71	65	75	75	75	43	..	..	..	....
	Minimum	24	16	0	-1	-2	10	0	9	4	7	10	7	30	32	30	11	30	31	41	33	33	24	46	30	24	41	35	33	..	..	..	21.
Louisville	Maximum	32	8	26	37	12	33	45	47	21	32	21	23	43	46	40	46	59	45	61	48	65	56	66	49	70	73	44	39	..	..	..	42
	Minimum	8	-4	2	-3	-4	10	32	21	7	12	10	7	14	32	27	30	41	34	34	31	32	33	40	31	32	44	32	32	..	..	..	22
Do. (Cherokee Park)	Maximum	64	19	25	38	19	34	45	46	43	32	32	22	44	44	43	45	58	52	62	58	63	59	67	64	70	73	70	38	..	..	..	47
	Minimum	17	-4	0	-1	-5	8	27	33	6	8	8	3	12	30	25	27	34	33	32	29	27	29	44	29	27	55	31	31	..	..	..	21
St. John §§	Maximum	24	5	30	37	12	33	48	52	18	32	28	24	44	47	41	51	57	45	64	55	61	59	69	50	72	74	40	37	..	..	..	43
	Minimum	24	-1	-1	4	-2	0	5	32	10	12	11	7	9	18	26	22	29	37	36	31	33	25	31	31	30	35	36	31	..	..	..	20
Scott	Maximum	62	28	21	33	8	32	42	47	32	24	24	18	40	45	40	45	60	50	63	54	58	56	60	54	62	70	65	40	..	..	..	44
	Minimum	28	-2	-1	2	-8	3	28	28	7	1	1	-1	6	27	25	28	32	30	32	31	27	26	41	29	26	52	30	30	..	..	..	19
Shelbyville §§	Maximum	25	..	28	33	7	33	34	44	15	30	21	21	40	44	38	45	58	41	61	47	59	54	63	47	67	73	36	37	..	..	..	^{a}40
	Minimum	25	-2	-2	1	-5	-3	7	29	6	4	5	4	5	16	26	20	20	34	34	30	30	25	26	30	30	35	35	31	..	..	..	17
Taylorsville	Maximum	63	18	25	39	10	34	47	51	38	33	25	21	44	47	42	47	59	49	66	57	65	57	68	61	69	75	70	57	..	..	..	47
	Minimum	18	0	1	0	3	4	29	31	8	5	5	5	13	32	27	29	27	35	36	32	30	24	36	30	27	56	34	32	..	..	..	21
Williamstown §§	Maximum	40	20	29	34	18	33	44	50	22	25	22	23	43	49	39	44	60	42	65	50	62	56	63	48	66	71	39	39	..	..	..	42
	Minimum	26	-2	-4	1	-7	-5	10	32	7	4	3	0	1	14	25	25	29	32	32	30	29	29	30	30	27	30	31	31	..	..	..	17
Eastern Division																																	
Beattyville §§	Maximum	32	9	31	42	11	39	52	48	19	31	22	22	50	48	38	53	64	56	64	60	72	64	62	56	71	77	49	48	..	..	..	4
	Minimum	32	1	1	0	-2	-1	14	28	13	2	11	14	12	11	34	29	28	32	44	41	29	25	25	40	26	29	47	35	..	..	..	21
Berea	Maximum	60	20	20	20	7	32	42	42	48	30	29	24	47	45	40	51	60	52	65	60	62	64	65	55	70	75	69	43	..	..	..	4
	Minimum	19	-1	-1	1	-3	6	18	38	10	8	8	5	12	33	27	30	39	43	42	38	36	32	26	33	28	58	36	30	..	..	..	2
Farmers	Maximum	68	33	26	40	5	35	46	50	53	29	29	26	15	48	57	47	61	60	67	63	66	57	62	66	70	78	69	41	..	..	..	4
	Minimum	22	-1	-1	-2	-9	-3	19	29	11	1	-3	-2	-6	31	26	20	23	57	36	29	28	25	32	34	24	55	36	31	..	..	..	1
Maysville §§	Maximum	37	11	28	38	13	34	46	..	..	..	..	..	12	50	40	49	48	40	68	50	62	56	60	49	64	72	43	40	..	..	..	4
	Minimum	32	4	0	1	-8	5	11	31	12	4	4	0	0	10	25	22	26	33	35	32	28	26	26	32	22	29	35	31	..	..	..	1
Middlesboro	Maximum	63	24	16	24	27	12	34	47	48	41	33	34	34	45	46	53	51	61	62	62	67	65	62	60	66	69	68	50	..	..	..	4
	Minimum	24	16	6	-1	6	0	8	22	35	15	8	22	11	14	30	27	30	45	38	43	32	31	37	47	28	51	49	38	..	..	..	2
Mount Sterling §§	Maximum	30	3	30	38	13	34	44	48	14	28	20	18	43	48	34	46	58	44	65	64	65	58	47	66	66	75	47	37	..	..	..	4
	Minimum	30	0	1	3	6	-3	14	32	9	3	6	2	4	15	26	23	27	38	38	36	35	26	32	27	31	38	37	31	..	..	..	1
Richmond §§	Maximum	29	5	26	46	14	35	46	45	20	29	26	20	46	45	37	48	69	50	61	62	67	60	67	52	69	70	43	44	..	..	..	4
	Minimum	6	0	1	21	4	10	28	33	8	12	8	5	13	36	27	29	37	40	35	38	32	29	43	33	29	59	40	33	..	..	..	2
Weeksbury	Maximum	44	29	27	35	48	39	17	50	57	33	31	27	59	42	56	51	61	61	64	58	60	60	62	67	70	76	70	45	..	..	..	5
	Minimum	24	1	2	0	-3	7	26	34	11	17	19	9	13	29	31	30	34	35	36	32	37	34	29	34	35	40	40	35	..	..	..	2
Williamsburg §§	Maximum	32	10	38	44	13	36	52	52	30	35	32	33	53	54	46	53	63	71	66	62	70	62	71	68	71	75	72	56	..	..	..	5
	Minimum	32	6	0	1	0	0	6	30	20	10	12	10	10	20	38	31	33	36	43	41	34	29	29	51	30	35	61	40	..	..	..	2

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

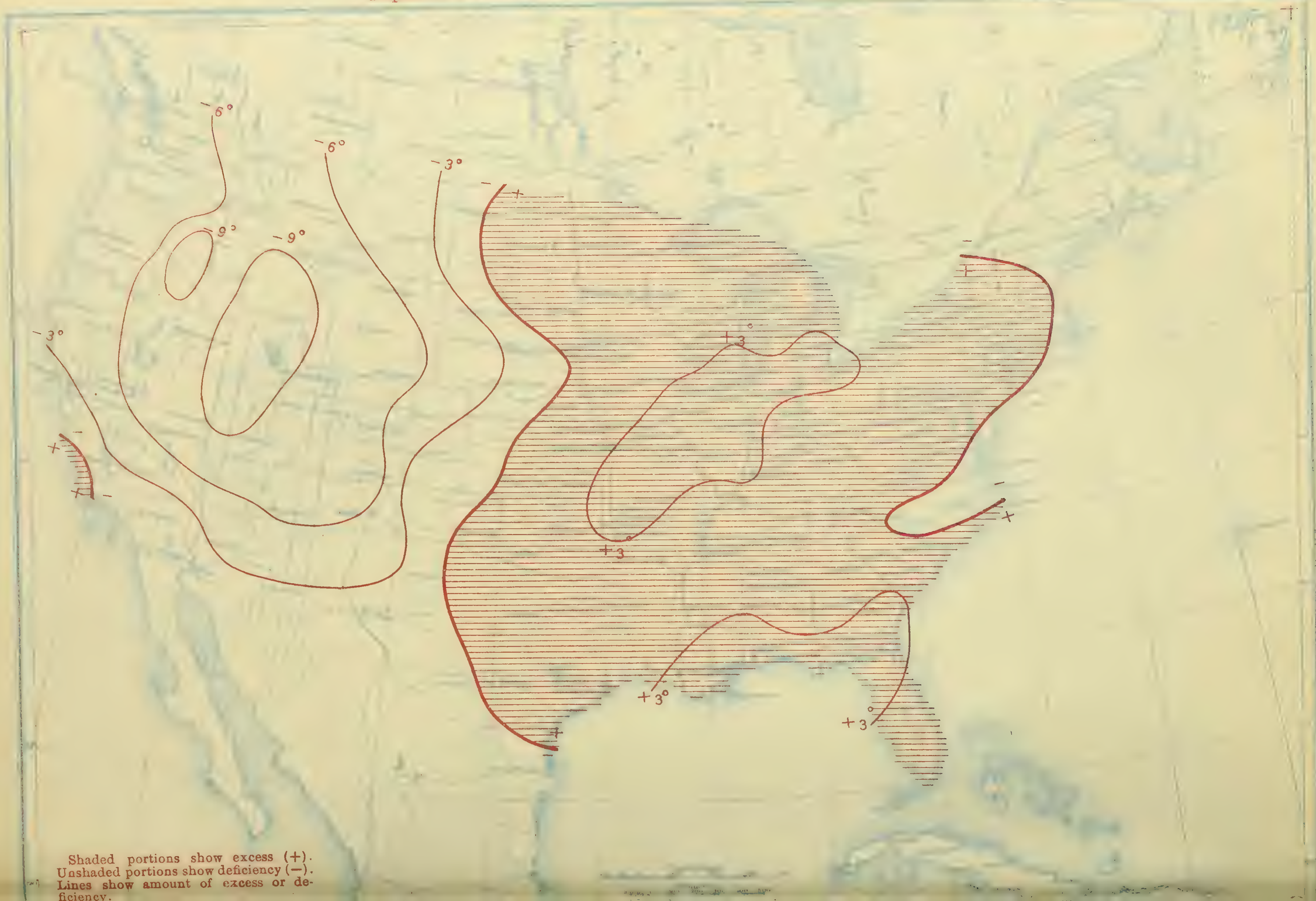
KENTUCKY SECTION

MARCH, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 21, 1917

Departure of the Mean Temperature from the Normal, March, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXII. Louisville, Ky., March, 1917. No. 3.

GENERAL SUMMARY.

The weather during the month was characterized by many storms, high winds, lack of sunshine, and excessive precipitation over most of the State. Precipitation in appreciable amount occurred over much of the State on 18 to 20 days. March records were broken at a number of stations in the southern part of the State. The soil was water-soaked practically all the month, and the frequent downpours of rain on a soil already wet caused much damage by erosion to fields that were bare or in wheat. The continued wet weather made difficult the sowing of tobacco plant beds, and delayed farming operations in general, outdoor work being from one to two weeks behind at the end of the month.

The temperature averaged slightly below normal, but was not unfavorable, as there were only a few days with low temperatures after the first decade. Maximum temperatures during the last two decades were moderately high on most days. Wheat improved considerably during this period and was in much better condition at the end of the month than at the beginning. Other vegetation made but little advancement

In the period 11-27th thunderstorms were frequent and caused considerable damage.

PRESSURE.

For the fourth month in succession the number of high and low pressure formations passing over or near this section was remarkably large. Also, most of them, but especially the "lows", were of great intensity. The distribution of these formations during March was about as follows: Low pressure areas, most of them deep troughs, occurred on the 7th, 10-11th, 13-14th (a. m.), 16-17th, 20th-21st, 22-23d (the parent storm of the tornado causing such great destruction and loss of life in New Albany, Ind.), 26-27th, and the 31st. High pressure areas dominated conditions during the 1st-5th, 8-9th, 12th, 14 (p. m.)-15th, 18-19th, 24-25th, and 27-30th.

The mean sea-level pressure, based on the records of two stations, was 30.12 inches. The extremes were 30.49 inches at Louisville and Lexington on the 1st, and 29.52 inches at Louisville on the 23d.

TEMPERATURE.

The average temperature for the State, as determined from the records of 42 stations, was 45.9°, which is 0.4° below normal. The first decade was unseasonably cold, the coldest days being the 5th and 6th, when minimum temperatures over the State ranged generally between 0° and 20°, the lowest for the month being 0° at Mt. Sterling on the 6th. Temperatures during the remainder of the month were moderate and seasonable. The month closed with a decided warm wave, the highest temperatures at practically all stations occurring on the 31st. The maximum for the month was 84° at Beattyville on the 31st.

PRECIPITATION.

The average precipitation for the State, computed from the records of 54 stations, was 6.53 inches, which is 1.64 inches above normal. The monthly amounts varied greatly over the State, ranging at the various stations between 2.63 inches at Owensboro and 13.39 inches at Middlesboro. In most of the counties bordering on the Ohio River, below Lewis, monthly amounts ranged generally between 3.5 and 5.0 inches. Over a broad belt running northeastward from the lower Cumberland to the Big Sandy between 6 and 8 inches occurred; while over the upper Cumberland basin and the southeastern counties amounts ranged from 8 to more than 13 inches. The principal periods with precipitation were: 1st-5th, 11-14th, 16-17th, 21st, 23d-24th, and 27th. There were only a few days without precipitation in some part of the State.

Snowfall, while confined almost entirely to the first week, averaged more than eight inches for the State. It was especially heavy over the central and northeastern counties, amounts in that district ranging between 10 and 16 inches.

WIND.

The total wind movement at Louisville was 13,024 miles, and at Lexington 13,479 miles, with average hourly velocities of 17.5 and 18.1 miles, respectively. The maximum velocity for 5 minutes at Louisville was at the rate of 52 miles per hour from the west on the 23d, and at Lexington 52 miles per hour from the southwest on 31st. Maximum velocities of 40 miles per hour, or greater, occurred at Louisville on nine days, and at Lexington on 11 days; while the wind movement at Louisville is the greatest on record for that station for any month.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 70 per cent, at 2 p. m. 48 per cent, and at 7 p. m. 55 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 56 and at Lexington 50.

MISCELLANEOUS.

March 11.—Heavy rains flooded sewers and carried away a number of bridges over small streams in Jefferson County. A mule was killed by lightning near Franklin, Ky. A residence was struck by lightning and damaged at Munfordville; and four negroes were killed by lightning at Bonnieville, Hart County.

March 20.—A barn was destroyed by lightning near Fern Creek, Jefferson County.

March 23.—A tornado at New Albany, Ind., about 3:08 p. m., cut a wide path through the north side of the city, destroying between 200 and 300 houses, including several manufacturing plants, two school houses, and a fire engine house and

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal	Highest.	Lowest.	Monthly average.	Departure from 25-year normal	No. of days with .01 in. or more.
1889	40.5	+ 5.8	84	18	1.52	−3.37	
1890	41.2	− 5.1	78	4	8.34	+3.45	
1891	41.8	− 4.5	71	9	8.08	+3.19	
1892	40.6	− 5.7	82	7	4.08	−0.81	
1893	45.0	− 1.3	89	5	2.76	−2.13	
1894	50.8	+ 4.5	86	10	2.72	−2.17	
1895	45.0	− 1.3	88	15	3.17	−1.72	9
1896	41.1	− 5.2	80	8	2.16	+1.27	12
1897	49.6	+ 3.3	86	20	7.94	+3.05	14
1898	50.7	+ 4.4	84	16	7.59	+2.70	13
1899	43.9	− 2.4	80	− 3	8.10	+3.21	15
1900	42.8	− 3.5	81	− 3	2.58	−2.31	9
1901	46.4	+ 0.1	87	3	3.50	−1.39	10
1902	47.2	+ 0.9	82	7	4.44	−0.45	11
1903	52.5	+ 6.2	85	19	4.43	−0.46	12
1904	47.7	+ 1.4	88	12	6.26	−1.37	12
1905	52.2	+ 5.9	86	22	4.45	−0.44	9
1906	39.2	− 7.1	75	3	6.37	+1.48	16
1907	54.9	+ 8.6	92	18	2.28	−2.61	10
1908	51.8	+ 5.5	88	19	5.42	+0.53	13
1909	44.8	− 1.5	74	17	5.14	−0.25	11
1910	55.0	+ 8.7	91	11	0.79	−4.10	[illegible]
1911	46.0	− 0.3	87	7	2.57	−2.32	[illegible]
1912	41.3	− 5.0	88	10	6.22	+1.33	[illegible]
1913	46.5	+ 0.2	85	9	7.22	+2.33	10
1914	41.8	− 4.5	78	2	3.62	−1.27	12
1915	37.8	− 8.5	65	11	2.11	−2.78	8
1916	43.5	− 2.8	84	4	3.39	−1.50	10
1917	45.9	− 0.4	84	0	6.53	+1.64	14

Climatological data for March, 1917.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	
Western Division.																				
Beaver Dam	Ohio	441	14	47.1	− 0.4	80	31	15	5	37	7.67	+3.33	2.15	14.0	13	12	7	12	ne.	W. T. Austin.
Blandville	Ballard	445	35	49.4	+ 2.3	80	31	12	5	31	5.33	+0.46	1.10	11.0	13	11	9	11	se.	E. W. Horr.
Calhoun	McLean	437	13	47.8	− 2.0	79	31	13	5	35	4.64	+0.02	1.55	14.0	13	9	13	9	sw.	W. A. Taylor.
Earlington	Hopkins	420	26	47.8	+ 0.3	81	31	15	5	38	5.92	+0.41	1.95	8.5	16	15	1	15	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	^{b}47.0	...	74^{d}	11†	13^{d}	5†	34^{d}	6.39	...	1.93	8.0	14	...	...	...	...	C. R. Lovell.
Hopkinsville	Christian	524	20	49.4	+ 0.2	80	31	12	5	40	56.3	+0.79	1.00	6.0	14	14	2	15	e.	W. F. Randle.
Marion	Crittenden	571	18	47.4	− 1.2	80	31	10	5	41	4.37	−0.42	1.78	...	8	14	7	10	w.	B. C. Paris.
Mayfield	Graves	364	7	46.9	...	79	31	9	5	41	3.99	...	0.92	2.5	12	15	6	10	sw.	J. N. Davis.
Owensboro	Daviess	479	20	46.0	− 0.9	79	31	16	5	32	2.63	−2.15	0.67	3.0	12	11	7	13	se.	Henry S. Berry.
Paducah	McCracken	341	17	50.1	+ 0.3	80	31	11	5	39	5.97	+1.27	1.31	2.9	13	18	0	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{b}50.6	+ 4.3	80^{b}	31	22^{b}	19	41^{b}	5.96	+1.64	1.50	9.0	9	11^{b}	10^{b}	8^{b}	s.	Dr. J. A. H. Miller.
Russellville	Logan	590	5	45.7		78	31	16	5	43	4.71	...	0.98	5.5	11	16	4	11	...	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	48.0	− 2.7	77	31	6	6	39	12.21	+6.04	2.25	6.6	12	14	3	14	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	43.9	− 1.2	80	31	8	6	39	7.18	+3.20	2.00	8.0	11	15	7	9	ne.	C. E. Barret.
Bardstown	Nelson	637	20	45.4	1.2	81	31	13	6	41	3.88	−0.81	0.65	10.5	12	16	5	10	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	48.3	− 0.3	82	31	13	6	45	6.89	+1.97	1.20	8.0	15	15	7	9	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	...	...	...	...	...	...	...	...	...	7.47	...	1.78	7.8	16	...	...	...	...	James H. Young.
Burnside	Pulaski	773	24	...	...	...	...	...	...	...	9.15	+3.88	1.80	7.0	14	...	...	...	...	C. L. Hurt.
Carrollton	Carroll	...	...	...	...	...	...	...	...	...	3.84	...	0.96	...	15	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	3	...	...	...	...	...	...	...	3.73	...	0.76	8.0	16	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	23	46.8	1.4	80	31	5	6	46	7.92	+2.09	1.70	9.5	16	12	11	8	w.	P. W. Ray.
Eubank	Pulaski	1177	22	42.2	− 4.1	78	31	4	6	49	7.60	+2.35	1.38	9.5	14	15	1	15	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	44.8	− 1.4	79	31	11	6	38	7.23	+1.96	1.47	8.0	17	13	3	15	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	47.4	− 2.7	79	31	16	5	45	7.13	+2.38	1.69	6.0	13	7	15	9	se.	J. E. Newman.
Greensburg	Green	581	24	44.0	− 2.8	79	31	5	6	41	6.94	+1.44	2.00	7.0	17	8	9	14	w.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	...	...	...	...	...	...	...	5.82	+1.61	1.94	6.0	15	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	19	46.9	+ 0.1	79	31	17	5	35	4.71	+0.11	0.90	10.2	11	13	4	14	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	44.9	− 1.2	80	31	4	6	44	7.93	+2.82	1.71	11.0	17	10	11	10	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	46.2	+ 0.2	80	31	13	6	33	6.57	+1.78	1.80	8.7	15	11	9	11	s.	John E. Stone.
Lexington	Fayette	989	29	44.2	+ 0.8	78	31	15	6	27	5.48	+0.76	1.14	15.9	16	13	7	11	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	47.5	− 0.6	83	31	10	6	43	4.72	+0.10	1.10	12.0	16	13	12	6	...	Loretto Academy.
LOUISVILLE	Jefferson	525	44	46.4	+ 1.1	78	31	16	6	28	6.30	+1.98	1.51	7.5	13	10	8	13	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do	534	7	45.4	...	80	31	9	6	37	6.30	...	1.40	5.7	12	14	7	10	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	43.4	− 1.7	78	31	10	6	38	4.63	−0.36	0.88	7.0	14	18	6	7	...	Sisters of Loretto.
Scott	Kenton	900	19	43.1	− 0.3	79	31	9	6	34	3.81	−0.63	0.99	4.4	14	11	6	14	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	42.6	− 2.1	79	31	9	6	40	7.64	+2.93	1.65	10.9	15	14	4	13	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	44.7	− 1.1	79	31	5	6	39	4.73	+0.39	0.78	10.2	16	13	5	13	sw.	E. D. Bourne.
Williamstown	Grant	943	14	41.6	− 1.6	78	31	8	6	42	4.44	+0.28	1.12	7.7	15	15	4	12	...	Miss Rose Carter.
Woodbury	Butler	...	...	...	...	...	...	...	...	...	6.28	...	1.31	5.0	14	...	...	...	...	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	43.6	− 2.6	84	31	3	6	53	6.81	+1.48	1.10	8.0	13	14	2	15	w.	A. H. Bowman.
Berea	Madison	1070	15	45.4	− 1.9	79	30†	12	6	49	9.41	+4.48	1.95	13.2	13	16	8	7	sw.	C. F. Remold.
Catlettsburg‡	Boyd	534	28	...	...	...	...	...	...	...	7.29	+3.72	1.30	9.0	14	...	...	...	...	Forester Farley.
Falmouth	Pendleton	600	28	...	...	...	...	...	...	...	3.89	−0.47	0.96	4.5	12	14	2	15	sw.	J. V. Oldham.
Farmers	Rowan	668	9	45.9	− 1.0	80	31	3	6	48	8.70	+4.14	1.40	13.0	15	16	3	12	w.	Durwood Cassity.
Hazard	Perry	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	Breathitt	776	5	...	...	...	...	...	...	...	6.93	+2.30	1.27	...	10	...	...	...	...	Jas. L. McCoy
London	Laurel	1190	2	...	...	...	...	...	...	...	9.37	...	1.70	5.0	14	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	13	...	...	...	...	...	...	...	6.45	+2.37	1.36	4.0	11	...	...	...	...	F. C. Sammons
Manchester	Clay	1400	7	...	...	...	...	...	...	...	8.03	+3.53	1.65	3.5	13	...	...	...	...	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	41.4	− 2.7	81	31	4	6	51	4.61	−0.03	1.22	13.9	14	15	5	11	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	47.8	− 0.7	76	31	15	6	39	13.39	+7.91	1.85	...	16	15	10	6	...	B. H. Perkins.
Mount Sterling	Montgomery	930	27	41.4	− 2.7	79	31	0	6	41	7.16	+1.23	1.35	14.5	13	15	5	11	sw.	W. R. McKee.
Pikeville	Pike	634	11	...	...	...	...	...	...	...	10.40	+6.19	1.76	2.0	16	...	...	...	...	I. M. Williams.
Richmond	Madison	926	23	45.0	0.3	80	31	11	6	35	5.42	+0.70	1.00	12.5	13	12	4	15	w.	J. W. Crooke.
Weeksbury	Floyd	1216	3	47.4	...	80	31	12	5	36	...	...	1.00	...	...	18	1	12	...	O. A. Lund.
Williamsburg	Whitley	939	19	45.4	0.7	80	13†	11	6	49	11.07	+6.15	1.90	1.0	15	12	2	17	w.	N. C. Jones
State averages and extremes		...	...	45.9	...	84	31	0	6	53	6.53	...	2.25	8.1	14	13	6	12	sw.	

All temperature data are taken from self-registering thermometers.
The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.
Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.
† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow
‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.

tower. Between 350 and 400 families were made homeless and 43 persons were killed outright or died from their injuries. The district which suffered heaviest consisted of cottages, occupied and mostly owned by working people. The money damage is estimated at a million to a million and a half dollars.

Rivers.—The Ohio rose rapidly during the first week, reaching flood stage at Evansville on the 7th, and at Cloverport on the 8th. Another rise set in in the upper reaches on the 12th, causing flood stages at Cincinnati on the 14th, from Catlett burg to Fern Bank on the 15th, at Madison, Louisville, an Paducah on the 16th, and at Cairo on the 17th. The floo quickly subsided in the upper reaches after the 17th; but floo stage continued below Cloverport until the 25th, and belo Evansville during the remainder of the month. There we also high tides in the Kentucky and other streams of the Sta during the first week, but not of sufficient volume to cause a damage of consequence.

Daily Precipitation for March, 1917.

STATIONS		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division																																	
Beaver Dam	G	.17	.51		.30	.54						.30	1.25	.40	.35		.30		T		.95		.80	1.35			.15						[illegible]
Blandville	M	.22	1.10	.12	.28			.14			.34		1.03	.01			.88				.05	.59		.55			.02						5.33
Calhoun	G	T	.30	T	.60	.20		.10			.06	.02	1.55	.08	.01		.53		T		T	.30		.52				.57					4.84
Farlington	G	.37	.30	.12	.10	.43		.20				.18	1.95	.28	.20		.50	.17				.15		.37	.37			.23					5.92
Greenville	G	.20	.75	.07	.40	.03		.15			.19	.05	1.93		.12		.67					.52		1.00				.31					6.39
Hopkinsville	C	.05	.85	.10	.50			.50			.20		.10		.45		.83				.15	1.00	.05	.40			.15						5.63
Marion	O	.63			.07						.39		1.78	.11			.85					.15		.39									4.37
Mayfield	M	.10		.70	.05	.20		.25				.52			.03		.92					.55		.02	.15			.50					3.99
Owensboro	O		.08	.24		.30		.07	T			T	.67	.19	.06		.32	T	T			.22		.02	.04			.42					2.63
Paducah	O		.71	.20	.10			.42			.77	T	1.31	.03	.10		1.00				.05	.46		.71				.11					5.97
Princeton	G	T	1.50	.40	.50							.35	T	.01			T	.90			T	.40		1.10				.86					[illegible]
Russellville	G		.35	.98		.45				.11						.24		.72	.24			.91		.24	.26			.21					4.71
Central Division																																	
Alpha	C	1.00	1.50	.15	.65	.01		1.05					2.15		.35		1.75		T			.60		2.25				.75					12.21
Anchorage	O		.24		.51	.08						.12	2.00	.47	.34		.30		T		T	1.33		1.30				.49					7.18
Bardstown	S	.05		.63	.40	.30			.10				.16	.46			.21					.50		.04	.65			.38					3.88
Bowling Green	G			.15	1.20	.65	.25		.10			.10	1.05	.05	.05		.58	.30	T			1.00		.13	.40			.58					6.89
Brownsville	G	.14	.11	.88	.30	.48			.09			.12	1.78	.34	.30		.40	.33				.53		.13	.96			.58					7.47
Burnside	C	.84	.20	1.35	.50	.10							1.80	.35	.28		.20	1.19	T			.89		.14	.68			.63					9.15
Carrollton	O	.02		.18	.10	.32			.08			.02	.07	.24	.96			.07	.71	.03		.74			.23			.07					3.84
Cloverport	O	T	.11	.18	.20	.40		.01	.10			.01	.56	.15	.11		.30	.07		T		.40		.03	.34			.76					3.73
Edmonton	G	.24	.65	.31	.10	.95		T			T	.04	1.70	.04	.39		1.05	.70	T			.35		.57	.50		.03	.30					7.92
Eubank	C	.46	.12	1.12	.88	.15			.03				.66	.25	.35		.13	1.38				.48			1.04			.55					7.60
Frankfort	K	.15	.08	.50	.31	.15	T		.09			.07	1.43	.20	1.25		.03	.17	.01	T		1.47		.12	.52			.68	T				7.23
Franklin	G	.47	.93	T	.46			T			.03	.18	.37		.39			1.39			T	.78	.03	1.69			.02	.39					7.13
Greensburg	G	.33	.09	.95	.40	.22			.04			.08	2.00	.24	.15		.35	.62	.01			.59		.01	.44			.42					6.94
High Bridge	K	.35	.03	.92	.40	.20	T		.03				.30	.06	.26		.11	.26	T	T		.60		.01	1.94			.35					5.82
rvington	O		.34		.25	.20		.15			T	T	.55	.48	.52		.30		T		T	.68		.90				.34					4.71
unction City	K	.12	.54	.62	.80	.01		.74				.02	.78	.08	.38		.45	.54				.51	T	1.71	.16	.01		.46					7.93
Leitchfield	G	.15	.70	.30	.20			.06			.15	*	1.41	.28			.54		.02		*	.53		1.80			.43						6.57
Lexington ***	K	.02	1.12	.30	.76	T		.10			.01	.51	.12	.19	.11		.18	T	T		.76	.24		.74			.23	.09					5.48
Loretto	S	.01	1.10	.10	.80	.70		.10			.20	.02	.50	.13	.01		.40		.10		.03	T		.50	.02			T					4.72
Louisville***	O		.31	.11	.31	.02		.18			T	1.33	.20	.72	T		.29		T		1.46	.05		.96			.36	T					6.30
Do. (Cherokee Park)	O			.28	.23	.32		.18				.02	1.40	.56	.29		.29					1.40		.94				.39					6.30
St. John	S	.08			.30	.40			.10			.06	.45	.18	.52		.36	.15	T			.40		.45	.88			.30					4.63
Scott	L		.10	.06	.15	.12		.12			T	.12	.08	.99	.19		.16		.01			.36		.88				.47					3.81
Shelbyville	S	.10	.07	.38	.28	.26	T		.09			T	1.65	.10	.93		.07	.04	T			1.45		.05	1.45			.72					7.64
Taylorsville	S	.06	.53	.03	.26	.18		.09			T	.01	.51	.38	.41		.10	.18	.02		T	.78		.73				.46					4.73
Williamstown	L	.07	.03	.25	.20	.13			.08			.08	.07	.36	1.12			.08	.09	T		.77			.66			.45	T				4.44
Woodbury	G	.05	T	.67	.20	.30						.21	1.31	.37	.88		.49	.12				.51		.16	.67			.34					6.28
Eastern Division.																																	
Beattyville‡	K	.45	.08	1.10	1.05	.25							.64	.04	.30		.05	1.03	T			.39			.98			.45					6.81
Berea	K	.16	.42	.12	1.10	.72		.12				T	1.78	T			.53	.65	T			.42		1.95	1.02			.42					9.41
Catlettsburg	B	.55		1.30	.50	.26			.15				.97	.51	.76			.44	.02			.75		.03	.95			.10					7.29
Falmouth‡	L	T	.06	T	.35	.17			.08			.07		.45	.96			.23	T	T		.80		.11	.05			.56	T				3.89
Farmers	L	.16	.56	.40	1.13	.15	T		.10				1.40	.57	.70	.29		.53				1.08		.47	.85			.31					8.70
Hazard	K																																
ackson	K	T	.80	1.27	1.18	T	T						.92	.25	.47		T	.94		.55					.10			.45					6.93
London	C	.85	.09	1.45	.93	.30							.77	.28	.30		.20	1.10				.70		.10	1.70			.60					9.37
Louisa	B	.23		.62	.40				.20				1.36	.32	.47			.54				.89			1.18			.24					6.45
Manchester	K	.92	.23	.47	.42	.34							.60	.15				1.15	.10			.72		.08	1.65			1.20					8.03
Maysville‡	O	.16	T	.48	.42	.21	T		.06			.04	.10	.40	1.22			.18	T	.02		.68			.39			.25	T				4.61
Middlesboro	C	1.07	1.45	.72	1.85	T		.09	.19				1.48		.32		.78	1.80				.45		.55	.97	.60	.40	.67					13.39
Mount Sterling	L	.15	T	.67	.50	.25	T					.02	1.25	.36	.65		T	.64	T	.05		.92		T	1.03			.57					7.16
Pikeville	B	.92	.44	1.76	1.06	.92	T		.12				1.22	.12	.26			1.12				.42	.12	.06	1.42			.32	.12				10.40
Richmond	K	.67	.15	1.00	1.00	.24			.05				.48	.10	.28		.05	.36	T	T				T	.70			.34	T				5.42
Weeksbury	B	.91	.47	.87													1.00	.50	.20	.10				.50	.20			.66					5.41
Williamsburg	C	1.15	.30	1.60	1.13	.14	T		.05				.95	.50	.25		.30	1.90		T		.60	T	.20	1.28			.72	T				11.07

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

Precipitation measured in the morning; amount then recorded is for the preceding 24 hours.   * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded.   T Trace, or less than 0.01 inch.

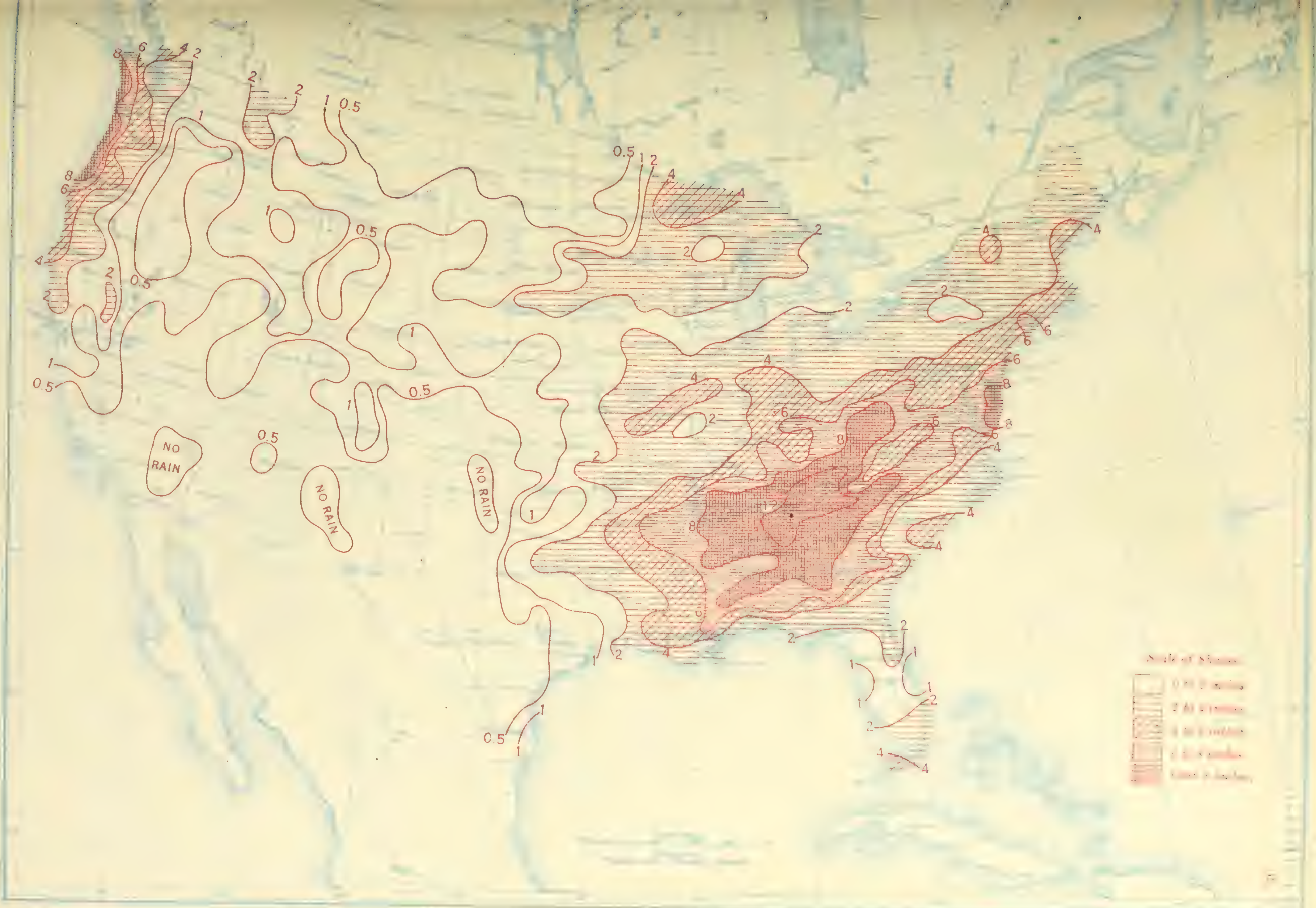
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for March, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	42	34	38	28	31	47	55	53	57	64	71	51	68	53	59	60	45	43	57	68	62	70	76	62	70	73	48	62	61	71	80	56.7
	Minimum	32	31	31	27	15	19	40	34	26	37	47	50	45	41	30	43	37	31	25	43	49	35	56	36	40	50	41	30	48	34	59	37.5
Blandville	Maximum	42	38	36	32	31	52	58	57	60	57	74	69	74	69	60	64	60	48	55	62	60	64	76	68	69	76	53	61	64	75	80	59.5
	Minimum	33	30	31	21	12	26	41	36	31	47	49	47	49	38	35	45	35	33	29	42	46	44	49	40	46	55	37	36	46	45	60	39.2
Calhoun	Maximum	41	38	47	36	31	46	56	55	58	63	71	69	62	69	60	61	61	42	53	65	63	69	74	65	67	73	63	60	63	72	79	59.1
	Minimum	32	29	31	22	13	20	39	34	27	42	47	42	40	39	32	41	36	30	26	41	45	40	47	37	42	50	31	34	45	37	56	36.4
Earlington §§	Maximum	43	35	33	25	35	50	57	54	62	66	74	65	72	57	62	62	41	44	56	69	62	73	77	66	72	73	51	63	65	72	81	58.6
	Minimum	33	31	31	25	15	21	35	36	26	38	48	48	47	40	31	42	38	31	26	39	48	35	54	35	42	55	38	29	46	34	50	37.0
Greenville	Maximum	41	38	37	36	36	47	56	54	59	63	74	72	73	71	59	61	61	44	53	65	60	67	74	63	69	72	61	..	..	..	..	d58.0
	Minimum	32	30	32	23	13	13	40	35	26	38	47	48	46	40	31	42	37	31	23	44	46	36	50	35	37	53	38	30	46	34	40	36.0
Hopkinsville §§	Maximum	43	40	39	35	34	49	58	55	60	60	75	72	75	71	62	61	61	47	54	66	61	66	75	65	72	69	62	63	67	76	80	60.4
	Minimum	34	31	33	24	12	21	41	36	29	41	48	50	49	42	34	44	34	33	27	43	50	41	51	37	40	50	39	33	47	36	57	38.3
Marion	Maximum	40	37	35	35	29	50	57	57	58	61	71	57	74	70	60	63	61	46	55	65	60	66	75	62	70	71	62	63	65	74	80	59.0
	Minimum	32	29	31	21	10	21	40	32	34	44	47	44	43	37	34	43	34	29	26	26	26	41	47	39	39	59	35	33	33	33	66	35.7
Mayfield §§	Maximum	42	34	36	37	35	52	58	55	62	62	75	65	75	58	60	64	49	48	56	64	60	69	74	64	70	75	53	61	57	76	79	58.9
	Minimum	34	31	30	24	9	11	30	34	27	31	46	50	49	39	36	37	35	32	29	29	45	43	49	38	41	42	37	33	35	39	41	34.9
Owensboro §§	Maximum	44	34	37	30	32	48	56	51	57	65	20	47	69	55	57	50	42	48	54	65	61	70	63	63	69	73	49	61	61	70	79	55.8
	Minimum	33	33	33	25	16	20	32	34	29	35	40	43	40	39	33	39	37	30	26	41	44	39	49	44	42	48	38	31	42	38	52	36.3
Paducah (Lone Oak)	Maximum	42	41	36	35	32	46	68	59	61	62	76	75	77	74	60	66	66	49	55	66	60	66	77	65	70	75	76	64	65	76	80	61.9
	Minimum	33	31	31	20	11	24	29	36	35	47	48	46	47	37	37	45	36	31	30	33	46	44	50	41	45	53	38	35	45	42	61	38.3
Princeton	Maximum	46	47	53	52	34	41	57	58	..	..	73	70	75	70	70	70	63	45	57	66	61	66	75	64	72	71	66	62	66	76	80	b62.3
	Minimum	34	35	33	27	28	30	32	34	..	..	40	48	48	45	40	45	54	29	22	45	45	36	47	32	51	47	40	28	45	35	55	b39.0
Russellville §§	Maximum	40	35	41	25	39	44	48	52	54	58	62	74	63	77	64	60	60	46	51	65	64	68	66	64	68	68	50	59	62	72	78	57.3
	Minimum	34	31	31	25	16	17	26	25	26	27	29	41	58	48	43	32	37	40	24	32	40	38	46	35	34	51	40	31	32	33	35	34.1
Central Division																																	
Alpha	Maximum	37	33	40	36	29	45	53	51	54	64	64	67	73	64	59	52	45	43	51	54	57	64	61	62	65	67	56	53	63	69	77	55.1
	Minimum	35	32	36	29	21	6	44	38	30	38	59	60	64	50	33	43	43	34	24	48	54	35	56	37	35	56	42	35	50	39	64	41.0
Anchorage	Maximum	41	34	40	32	28	43	47	48	52	67	67	65	52	62	56	57	59	37	50	65	60	67	65	60	70	77	60	59	57	67	80	55.6
	Minimum	31	29	30	22	11	8	26	34	26	28	51	40	35	33	26	37	35	27	18	39	40	31	47	32	33	43	36	27	40	30	52	32.2
Bardstown §§	Maximum	38	34	39	30	30	46	53	51	54	68	70	48	58	63	62	58	42	40	53	68	60	72	68	68	72	76	49	60	63	73	81	56.4
	Minimum	32	20	30	28	18	13	35	35	26	35	45	48	43	39	28	31	39	29	21	34	44	36	45	35	37	40	39	28	38	32	53	34.4
Bowling Green §§	Maximum	40	39	42	29	35	48	56	56	61	61	75	60	76	59	63	61	49	45	57	68	61	71	73	71	72	73	51	65	63	75	82	59.3
	Minimum	34	32	32	26	18	13	24	34	35	34	50	53	47	43	33	42	39	32	24	23	53	26	54	58	54	50	39	31	44	38	41	37.3
Edmonton	Maximum	40	38	41	38	32	46	52	53	54	68	73	70	76	69	60	58	57	41	55	64	62	77	69	72	70	77	50	54	63	71	80	59.0
	Minimum	32	31	33	29	17	5	30	30	34	25	50	48	48	47	29	41	40	30	21	39	51	31	33	35	33	47	38	36	25	34	51	34.6
Eubank §§	Maximum	33	34	39	28	24	43	51	50	55	65	70	57	70	55	59	54	45	37	53	61	55	68	64	61	69	68	46	56	61	68	78	54.1
	Minimum	27	31	30	26	18	4	13	35	24	25	33	56	44	46	27	30	38	30	19	28	41	31	33	31	31	36	38	27	29	28	29	30.3
Frankfort	Maximum	39	37	40	38	29	42	48	48	50	66	68	68	51	63	54	58	58	41	50	64	61	65	67	60	67	74	67	58	58	66	79	55.9
	Minimum	31	29	30	26	17	11	28	34	28	28	49	39	36	39	28	37	38	28	21	36	44	32	54	34	34	44	38	30	44	31	50	33.8
Franklin	Maximum	39	37	41	33	29	43	53	52	55	52	73	71	76	69	58	59	60	44	51	65	60	68	74	60	67	68	60	60	63	71	79	57.7
	Minimum	33	31	31	23	16	17	37	34	30	39	46	52	48	43	35	42	39	32	25	46	48	42	41	38	41	52	39	33	45	38	34	37.1
Greensburg §§	Maximum	37	35	41	30	31	45	35	53	52	67	72	54	68	55	59	57	45	41	54	65	57	70	70	61	70	73	48	59	62	71	79	55.1
	Minimum	33	31	31	27	18	5	17	35	25	28	42	53	45	42	29	32	41	30	21	30	46	32	36	34	33	43	39	27	33	32	38	32.5
Irvington	Maximum	37	35	36	32	27	45	49	50	64	66	68	66	59	67	57	58	60	40	51	66	59	69	70	61	68	72	62	60	60	69	79	56.8
	Minimum	32	30	32	24	17	18	40	36	29	40	50	42	38	37	30	40	37	28	24	43	45	40	51	37	42	52	38	32	45	38	60	37.0
Junction City	Maximum	36	34	38	38	29	42	57	51	60	66	68	68	61	64	59	54	54	47	52	65	51	69	65	60	69	72	60	57	61	68	80	56.6
	Minimum	30	29	31	26	13	4	29	37	29	26	50	42	42	40	22	38	37	38	16	21	46	30	53	31	31	46	38	31	47	28	47	33.2
Leitchfield	Maximum	38	35	38	35	30	45	55	52	55	65	72	69	60	58	59	57	55	40	52	65	59	70	69	61	68	74	60	59	60	70	80	56.9
	Minimum	30	29	31	22	15	13	40	34	25	35	51	40	40	40	28	40	38	30	21	37	46	35	48	34	37	49	38	32	46	37	60	35.5
Lexington	Maximum	34	32	37	27	24	42	48	45	48	64	66	57	63	62	54	57	55	33	49	62	54	66	63	56	67	70	54	55	56	64	78	53.0
	Minimum	30	27	26	19	15	15	34	34	30	41	52	38	36	39	34	36	33	25	24	40	46	44	42	40	44	51	32	31	42	39	55	35.3
Loretto	Maximum	42	39	42	43	30	45	50	58	55	73	73	73	55	60	60	60	59	44	55	63	68	70	80	67	70	72	63	60	67	79	83	59.9
	Minimum	32	31	32	24	23	10	23	36	25	30	44	43	40	40	35	39	39	29	18	45	41	29	55	32	32	50	46	27	43	39	55	35.1
Louisville	Maximum	40	35	38	29	28	43	50	50	53	66	68	56	61	63	55	59	59	38	50	64	60	67	69	60	68	74	55	59	59	66	78	55.5
	Minimum	32	30	29	21	18	16	37	36	33	38	53	39	36	38	35	40	36	28	25	42	44	42	46	41	46	51	37	35	46	40	62	37.2
Do. (Cherokee Park)	Maximum	38	36	36	36	28	44	50	49	53	67	68	67	49	61	54	55	60	40	51	66	63	68	68	62	70	75	66	61	60	68	80	56.4
	Minimum	30	28	30	24	16	9	32	34	28	30	49	39	35	38	30	38	36	27	21	39	43	34	54	35	40	47	38	30	45	32	53	34.3
St. John §§	Maximum	37	33	37	25	32	43	51	53	56	65	68	46	68	45	59	59	43	41	50	65	58	68	69	63	67	72	49	58	63	68	78	54.5
	Minimum	31	29	29	25	11	10	19	34	24	32	40	45	41	39	28	39	38	30	21	29	42	30	41	32	34	46	38	27	36	33	46	32.2
Scott	Maximum	40	35	35	34	27	38	44	44	50	66	68	65	39	56	62	52	56	37	46	61	59	64	62	59	67	73	63	57	53	62	79	53.3
	Minimum	29	28	29	22	15	9	29	35	28	32	51	34	32	38	30	32	35	25	19	36	42	33	52	34	38	47	36	29	41	32	49	32.9
Shelbyville §§	Maximum	37	34	42	30	28	42	45	49	54	69	67	45	51	50	56	57	42	36	52	66	60	66	64	61	69	75	47	58	59	67	79	53.5
	Minimum	30	28	29	26	17	9	18	31	26	32	42	41	37	34	30	34	38	27	19	28	44	35	42	33	37	45	37	27	33	32	39	31.6
Taylorsville	Maximum	38	37	39	34	27	42	49	49	52	67	68	66	52	65	54	57	58	40	50	65	59	67	66	60	70	74	64	64	59	67	79	56.1
	Minimum	32	29	31	25	17	5	30	34	27	28	50	40	37	40	26	39	38	29	20	38	40	30	54	34	32	40	40	28	46	28	46	33.3
Williamstown §§	Maximum	38	32	37	29	26	41	44	45	52	66	66	44	59	48	57	55	47	34	48	62	59	65	61	60	68	73	46	56	56	63	78	52.1
	Minimum	30	28	28	26	16	8	10	34	28	32	35	36	34	32	31	33	35	26	20	26	42	39	42	35	39	42	37	31	41	34	36	31.2
Eastern Division																																	
Beattyville §§	Maximum	35	35	41	31	29	46	55	52	59	73	74	58	64	60	62	60	51	39	51	69	57	73	65	64	75	73	49	62	64	71	84	57.5
	Minimum	34	32	31	29	19	3	6	20	21	24	21	52	40	42	30	31	40	35	27	23	36	35	36	30	33	34	37	27	33	28	31	29.7
Berea	Maximum	36	33	36	39	35	44	53	51	56	66	72	67	67	66	58	57	42	38	51	63	57	69	65	61	70	71	57	58	61	79	79	56.7
	Minimum	29	30	28	26	18	12	22	35	30	38	52	43	42	41	29	38	32	28	19	34	42	32	50	33	35	52	38	40	41	30	34	34.0
Farmers	Maximum	37	38	43	43	33	42	51	51	52	70	73	75	75	70	57	64	57	41	50	66	72	62	75	75	73	78	79	58	64	73	80	60.5
	Minimum	31	29	31	27	11	3	9	36	28	25	53	42	36	42	27	32	38	27	18	27	46	31	44	31	29	40	38	30	45	25	40	31.3
Maysville §§	Maximum	40	35	40	40	31	43	48	46	49	70	65	46	60	52	56	60	41	44	50	63	58	67	63	64	71	77	48	58	67	64	81	54.7
	Minimum	31	31	29	26	11	4	7	21	30	25	25	41	34	33	31	32	31	27	20	21	41	31	32	33	32	34	39	31	32	28	29	28.2
Middlesboro	Maximum	41	37	52	45	32	47	57	54	63	65	68	67	75	71	62	57	55	48	54	59	64	65	62	63	69	67	54	57	63	69	76	58.6
	Minimum	36	35	37	31	22	15	26	38	25	32	50	55	52	54	31	39	48	32	21	39	47	35	57	41	30	40	38	28	44	30	38	37.0
Mount Sterling §§	Maximum	35	34	35	28	26	30	46	50	69	67	70	45	62	52	55	60	40	35	49	63	52	64	63	59	69	72	46	56	57	65	79	52.7
	Minimum	29	28	27	25	15	0	12	29	28	30	38	40	36	37	31	35	36	29	19	27	41	34	34	32	33	45	37	28	29	30	40	30.1
Richmond §§	Maximum	35	35	39	29	25	44	50	50	54	68	69	50	50	53	59	61	53	39	51	59	60	69	65	60	70	72	46	57	60	65	80	54.1
	Minimum	30	29	29	26	17	11	39	33	29	40	50	16	40	40	33	39	41	28	22	42	34	44	50	36	44	49	38	31	44	37	45	36.0
Weeksbury	Maximum	57	41	54	42	34	45	50	60	57	71	70	73	75	70	59	53	50	55	50	60	66	69	67	68	74	70	65	59	64	70	80	60.6
	Minimum	32	30	31	26	12	30	24	30	29	39	36	40	43	44	34	32	30	20	27	34	40	34	50	39	45	34	34	31	43	42	44	34.2
Williamsburg §§	Maximum	45	47	42	30	28	50	60	53	61	65	72	70	80	62	65	58	52	38	58	62	64	66	68	62	53	58	56	63	65	71	80	58.2
	Minimum	38	32	33	30	23	11	16	38	22	28	31	48	52	53	31	31	42	30	22	23	50	39	39	32	31	33	35	28	30	30	31	32.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
NO RAIN
NO RAIN
NO RAIN
NO RAIN
0.5
1
2
4
6
8

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

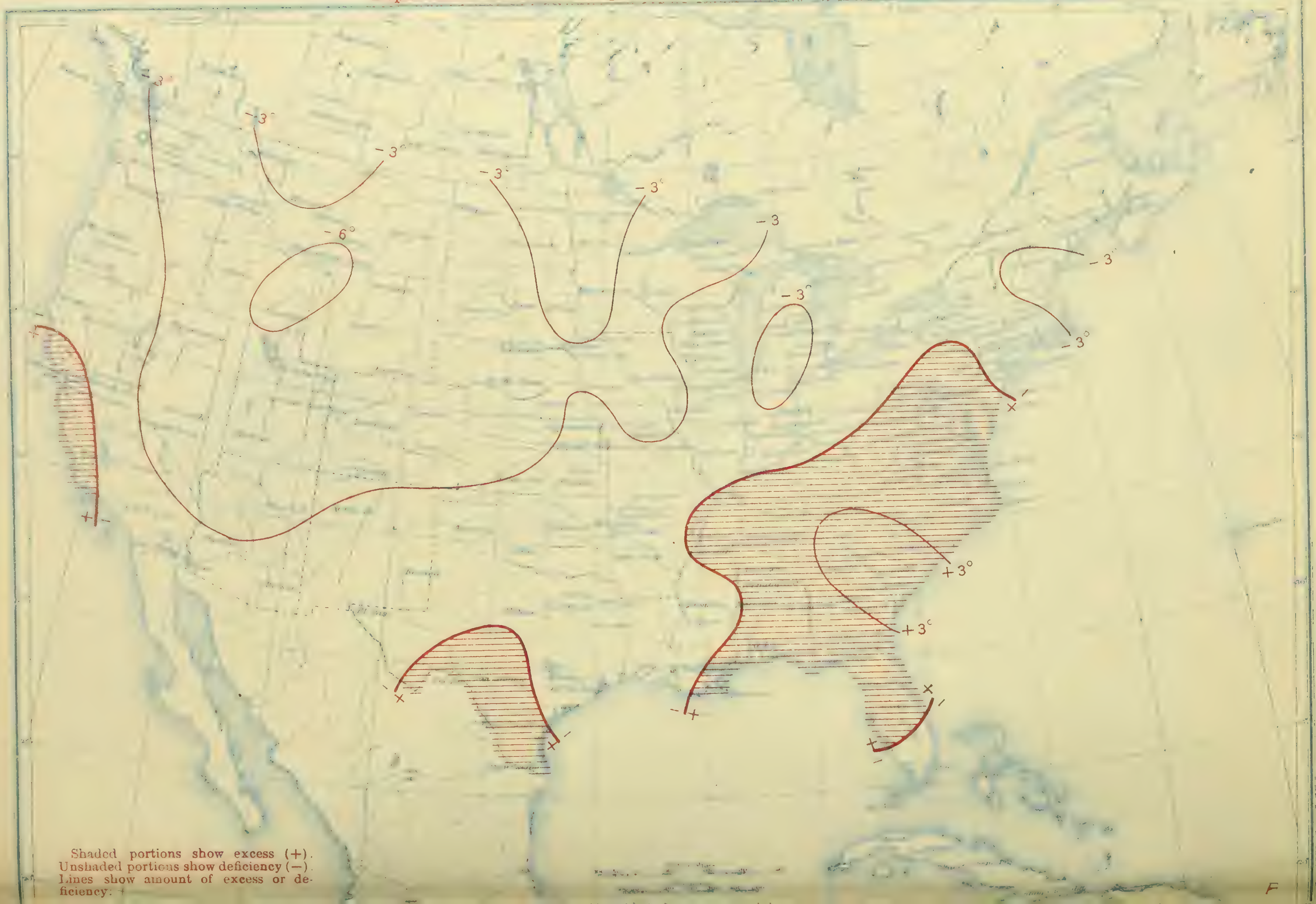
KENTUCKY SECTION

APRIL, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 20, 1917

Departure of the Mean Temperature from the Normal, April, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

L. XXII. LOUISVILLE, KY., APRIL, 1917. No. 4.

GENERAL SUMMARY.

Cold, wet weather characterized the first half of the month. he low night temperatures, frequent freezes, and water-soaked il prevented the development of vegetation. The soil was too t for plowing or planting, and but little farm work or gardeng could be done until near the middle of the month. Killing osts and severe freezes occurred on several dates, being espeally severe and general on the 9th, 10th, and 14th, and in the stern counties on the 15th. A snowstorm of several hours ration occurred over the northern and central counties on the h. Early peaches were damaged to some extent by the low mperatures, but later varieties and other fruits escaped serious jury on account of their dormant condition.

During the last half of the month conditions were decidedly vorable for farm work, and rapid progress was made in the eparation of the soil and planting of gardens. By the end of e month considerable progress had been made in corn plantg in the southern counties. Tobacco plants made good growth ring the last two weeks, but most vegetation failed to make asonable advancement on account of the cool nights and dry eather of the last week. The needed moisture was furnished good time by the rains of the 28-30th. Thunderstorms were ore or less general during this period.

PRESSURE.

During the month eight distinctive low pressure formations decided strength and magnitude moved over or near this ction in their progression eastward. All were attended by ins over the whole or much of this State; several were accomnied by severe thunderstorms and squalls, and one by snow. e periods of influence of these lows in this section were as llows: April 1st-2d, 4-6th, 7-8th, 12th, 20th, 25-26th, 28-29th, d 30th. High pressure areas dominated during the periods, 3d, 9-11th, 14-18th, and 21st 22d.

The mean sea-level pressure for the State, based on the records two stations, was 30.00 inches. The extremes were 29.35 ches at Lexington on the 5th, and 30.40 inches at Louisville the 3d.

TEMPERATURE.

The average temperature for the State, based on the reports of 2 stations, was 55.8°, which is 0.1° below normal. Minimum mperatures during the first two weeks were almost continusly below 40°, and in the central and eastern counties were enerally near freezing. The lowest for the month was 19° at helbyville on the 9th. Maximum temperatures in the 80's ccurred frequently at practically all stations during the last o weeks, and minimum temperatures were generally above 0°, but still too low on most days to favor rapid development f vegetation. The highest for the State was 90° at Beattyville nd Bowling Green on the 18th.

PRECIPITATION.

The average precipitation for the State, determined from the ecords of 54 stations, was 5.02 inches, which is 0.95 inch above ormal. There was marked variation in the distribution over he State, monthly amounts at the various stations ranging beween 2.22 inches at Catlettsburg and 8.23 inches at Blandville; hile in nearby localities amounts frequently differed by several nches. In general the central and western counties received ve to seven inches, the east-central counties four to five inches, nd the eastern mountain counties two to four inches. Excessve rains were general over the central and western counties n the 1st and 2d, and rains were also heavy on the 5th and 6th. Moderate precipitation occurred on the 8th and 13th. From the 14th to 27th, inclusive, there was no rain of consequence, and the soil was becoming dry enough to interfere with plowing. This condition was relieved generally by good rains during the 28-30th.

WIND.

The total wind movement at Louisville was 10,112 miles, and at Lexington 11,113 miles, with average hourly velocities of 14.0 and 15.4 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 62 miles per hour from the east on the 30th, and at Lexington 54 miles per hour from the southwest on the 20th. This is the highest wind velocity on record for April at Louisville. Maximum velocities of 40 miles per hour, or greater, occurred on four days at both Louisville and Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 69 per cent, at 2 p. m. 42 per cent, and at 7 p. m. 51 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 61 and at Lexington 52.

MISCELLANEOUS.

April 12.—A barn was damaged by lightning at Bowling Green.

April 30.—Lightning struck a barn at Vealsburg, Graves County, killing two men and five mules. Severe hailstorms occurred in many localities. In Montgomery County fruit was beaten from the trees, and in Webster County gardens, trees and windows were damaged by hail.

Rivers:—At the beginning of the month the Ohio was above flood stage from Evansville to Cairo, and also the Mississippi from Cairo to the southern border of the State. In the upper reaches of the Ohio the heavy rains of the first week caused rapid rises; but the rises were quickly followed by a rapid decline. The Ohio declined below flood stage at Evansville on the 8th, at Paducah on the 12th, and at Cairo on the 16th. It continued falling steadily until the 28th, pool stages being reached several days previously in the upper river.

ERRATA.—March, 1917. Lexington, maximum temperature on the 18th should be 34; Edmonton, total precipitation should be 8.12 inches.

COMPARATIVE DATA FOR APRIL.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	57.0	+ 1.1	89	24	1.61	−2.46	
1890	57.0	+ 1.1	92	28	4.04	−0.03	
1891	58.0	+ 2.1	92	24	2.52	1.55	
1892	56.0	+ 0.1	88	22	7.12	+3.05	
1893	58.0	+ 2.1	94	21	6.99	+2.92	
1894	56.0	+ 0.1	94	23	3.54	−0.53	
1895	57.2	+ 1.3	94	22	3.18	−0.89	[illegible]
1896	63.6	+ 7.7	96	24	1.65	−2.42	6
1897	55.5	0.4	90	25	6.03	+1.96	11
1898	52.4	− 2.5	86	19	3.38	−0.69	9
1899	57.2	+ 1.3	96	20	3.16	−0.91	9
1900	56.2	+ 0.3	90	15	2.15	−1.92	8
1901	50.9	5.0	91	23	4.01	−0.06	10
1902	54.2	1.7	93	22	2.65	−1.42	9
1903	55.4	− 0.5	90	22	4.43	+0.36	12
1904	50.8	− 5.1	85	16	2.83	−1.24	11
1905	56.7	+ 0.8	91	23	3.00	−1.07	9
1906	59.5	+ 3.6	94	23	1.40	−2.67	6
1907	48.2	7.7	87	19	2.78	−1.29	11
1908	59.8	+ 3.9	89	23	6.56	+2.49	14
1909	56.1	+ 0.2	96	21	5.98	+1.91	10
1910	55.4	− 0.5	88	23	5.14	+1.07	14
1911	53.8	2.1	90	20	7.06	+2.99	14
1912	58.4	+ 2.5	87	25	7.90	+3.83	12
1913	55.3	0.6	89	27	2.73	1.34	10
1914	55.7	− 0.2	91	13	3.62	−0.45	10
1915	60.1	+ 4.2	96	17	0.96	−3.11	5
1916	54.0	1.9	89	23	2.64	−1.43	9
1917	55.8	0.1	90	19	5.02	+0.95	8

Climatological data for April, 1917.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	14	54.8	- 0.6	88	19	29	9	42	7.22	+3.11	3.90	....	9	17	3	10	se.	W. T. Austin.
Blandville	Ballard	445	35	57.8	+ 0.6	83	18	30	9	29	8.23	+4.04	4.18	T	10	13	7	10	w.	E. W. Horr.
Calhoun	McLean	437	13	57.3	1.6	87	24	28	9	43	6.33	+1.49	2.77	T	9	10	13	7	nw.	W. A. Taylor.
Earlington	Hopkins	420	26	56.4	0.8	88	18*	30	3*	41	5.61	+1.03	1.90	....	11	14	2	14	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	^{b}57.0	.....	85	17†	29	10	36	6.60	......	2.22	....	8	..	..	..	.....	C. R. Lovell.
Hopkinsville	Christian	524	20	57.2	+ 0.4	86	18*	31	10	42	6.20	+1.85	3.30	0	7	16	3	11	e.	W. F. Randle.
Marion	Crittenden	571	18	^{d}57.9	+ 0.6	84	18	29^{f}	9	42^{f}	6.20	+1.62	3.23	.....	5	15	7	8	ne.	B. C. Paris.
Mayfield	Graves	364	7	55.8	1.4	84	18	30	3*	41	4.88	+0.74	2.00	......	6	14	6	10	s.	J. N. Davis.
Owensboro	Daviess	479	20	55.4	+ 0.2	86	18	30	9	33	5.22	+1.12	1.75	...	11	9	10	11	s.	Henry S. Berry.
Paducah	McCracken	341	17	59.6	+ 0.4	86	18	31	9	37	7.55	+3.50	4.00	0	8	20	0	10	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{c}59.2	+ 0.6	86	18*	30	3*	43	5.30	+1.24	2.30	...	6	14^{c}	8^{c}	5^{c}	s.	Dr. J. A. H. Miller.
Russellville	Logan	590	5	55.6	.....	87	24	29	9*	44	4.19	......	2.47	0	5	21	3	6	.....	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	57.8	+ 0.5	83	19	31	9*	32	7.02	+1.75	2.50	0	7	19	5	6	w.	W. W. Hicks
Anchorage	Jefferson	700	16	53.4	0.0	85	18	21	9	40	5.61	+1.63	1.49	2.0	7	20	5	5	sw.	C. E. Barret.
Bardstown	Nelson	637	20	55.4	+ 0.1	88	18	25	9	47	7.25	+3.38	2.00	....	9	11	11	8	e.	Chas. M. Talbott.
Bowling Green	Warren	500	26	57.7	− 0.4	90	18	29	9*	43	5.86	+1.40	2.15	T.	8	15	9	6	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	....	....	.....	.....	....	....	....	....	....	6.41	......	2.91	.....	7	..	..	..	.....	James H. Young.
Burnside	Pulaski	773	24	....	....	....	....	....	....	....	4.85	+0.90	1.55	.....	7	..	..	..	.....	C. L. Hurt.
Carrollton	Carroll	....	....	....	....	....	....	....	....	....	3.68	......	1.72	......	8	..	..	..	.....	Charlie Oliver.
Cloverport	Breckenridge	375	3	....	....	....	....	....	....	....	5.97	......	1.91	.....	13	..	..	..	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	56.2	+ 0.4	87	18^{r}	28	10	52	3.48	−0.62	1.17	0	9	12	10	8	w.	P. W. Ray.
Eubank	Pulaski	1177	22	55.2	+ 1.4	84	18	25	10	43	3.64	−0.41	1.26	......	9	7	13	10	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	54.2	− 0.9	85	18	24	9	38	6.16	+2.43	2.72	0.2	9	16	4	10	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	57.8	− 1.3	86	27	28	9	34	5.86	+1.25	1.36	0	10	5	20	5	nw.	J. E. Newman.
Greensburg	Green	581	24	55.0	0.0	86	18	27	10	41	4.48	+0.82	1.66	T	9	9	7	14	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	....	....	....	....	....	....	....	5.26	+1.57	2.70	......	9	...	..	..	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	19	55.8	+ 0.3	84	18	27	9	33	7.09	+3.07	1.76	T.	8	14	8	8	sw.	W. J. Piggott
Junction City	Boyle	1087	23	55.0	+ 0.5	86	18	24	10	44	5.82	+2.11	1.62	T	13	12	11	7	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	56.0	+ 0.6	86	18	27	9	38	7.48	+3.40	3.90	......	8	17	6	7	ne.	John E. Stone.
Lexington	Fayette	989	29	53.8	+ 0.1	83	18	22	9	36	3.97	+0.63	1.77	0.4	12	11	11	8	se.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	56.6	+ 1.7	86	18	26	9	40	6.28	+2.57	2.00	T.	10	13	9	8	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	44	54.8	− 1.4	86	18	26	9	32	4.93	+0.86	2.16	3.2	12	9	9	12	s.	U. S. Weather Bureau
Do. (Cherokee Park)	Do.	534	7	54.6	....	88	18	22	9	40	5.19	......	1.27	3.0	10	14	9	7	nw.	Wm. I. Hunt.
St. John	Hardin	777	20	54.0	− 0.4	85	18	26	9	43	6.04	+2.17	2.70	T.	10	22	4	4	.....	Sisters of Loretto.
Scott	Kenton	900	19	52.6	− 0.5	87	18	21	9	36	4.41	+1.23	1.01	1.5	9	6	11	13	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	52.6	− 2.1	86	18	19	9	41	5.93	+2.21	2.20	0.6	9	12	6	12	w.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	53.8	− 0.6	85	18	24	9	40	6.29	+1.82	1.83	0.2	8	14	7	9	ne.	E. D. Bourne.
Williamstown	Grant	943	14	52.2	− 0.1	86	18	20	9	40	4.07	+0.97	1.70	1.5	7	14	4	12	.....	Miss Rose Carter.
Woodbury	Butler	....	....	....	....	....	....	....	....	....	5.49	......	3.20	T	6	..	...	..	.....	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	56.2	+ 2.8	90	18	24	10	49	3.76	−0.51	0.92	T.	9	17	1	12	sw.	A. H. Bowman.
Berea	Madison	1070	15	55.8	+ 0.2	87	18	25	10	42	3.91	+0.30	1.82	....	7	25	1	4	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	....	....	....	....	....	....	....	2.22	−2.43	0.53	....	7	.....	..	..	.....	Forester Farley.
Falmouth	Pendleton	600	28	....	....	....	....	....	....	....	4.55	+1.32	2.00	T.	10	11	8	11	.....	J. V. Oldham.
Farmers	Rowan	668	9	52.8	− 1.6	86	18†	21	7	47	3.24	−1.26	0.90	......	7	17	2	11	w.	Durwood Cassity.
Hazard	Perry	.....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Jackson	Breathitt	776	5	....	....	....	....	....	....	....	3.26	......	1.04	.....	7	....	....	....	...	Jas. L. McCoy.
London	Laurel	1190	2	....	....	....	....	....	....	....	3.24	......	0.85	....	7	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	13	....	....	....	....	....	....	....	2.31	−0.91	0.62	....	6	....	....	....	....	F. C. Sammons
Manchester	Clay	1400	7	....	....	....	....	....	....	....	2.30	−1.05	0.78	......	5	....	....	....	....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	52.8	− 0.8	89	18	22	9	51	2.65	0.78	1.10	1.0	8	14	8	8	e.	Mrs Mary D. Marsh.
Middlesboro	Bell	1128	20	58.4	+ 2.2	86	18	27	10	44	3.22	−1.57	0.81	0	8	19	10	1	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	27	53.6	+ 0.2	85	18*	23	9	40	5.89	+2.24	2.10	0.5	10	16	4	10	se.	W. R. McKee.
Pikeville	Pike	634	11	....	....	....	....	....	....	....	2.21	−1.69	0.76	0	6	....	....	....	....	I. M. Williams.
Richmond	Madison	926	23	56.8	+ 1.6	86	18†	25	9	36	4.58	+0.97	1.40	....	9	15	9	6	e.	J. W. Crooke.
Weeksbury	Floyd	1216	3	59.9	......	89	18†	28	14	49	3.59	......	0.95	0	9	21	4	5	.....	O. A. Lund.
Williamsburg	Whitley	939	19	57.9	+ 2.2	88	18	28	10	49	3.34	1.06	0.95	0	10	16	6	8	w.	N. C. Jones.
State averages and extremes	....	....		55.8	......	90	18	19	9	52	5.02	......	4.18	0.5	8	14	7	9	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

* Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post office address Normal, Ky ; ‡‡Nerinx, Ky

Daily Precipitation for April, 1917.

Stations		Day of month																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
ver Dam	G	.15	3.90		.60	42			.26					.60												T.		.28	.82		.19		[illegible]
adville	M	4.18			.09	71		03	1.22											T	.15					.04			[illegible]	[illegible]	[illegible]		[illegible]
houn	G	2.77	.53			91	.01		.55				T	.39						T	T					T.			[illegible]	[illegible]	[illegible]		[illegible]
lington‖	G	1.40	1.90			42	.13		.42	.02				.22															.48	.30	.06		[illegible]
enville	G	1.30	2.22	89					.58				55																	.30	.41		[illegible]
kinsville	C		3.30			.49	.20		.35					.45															.30	1.11			[illegible]
non	O	3.23				.75						.80		.08															1.34				[illegible]
field‡	M	1.07	2.00			74	.02		.60																				.45				[illegible]
nsboro‖	O	.72	1.75	T		46	.37		.20	.09				.23			01				T.					T		[illegible]	[illegible]	[illegible]	[illegible]		5.22
ucah	O	4.00	11		.10				1.62												.03					[illegible]			[illegible]		[illegible]		7.55
ceton	G	2.30	.80		T	.80			.50											T	T								.60		.30		[illegible]
sellville	G		2.47			54	12			.08																				[illegible]			[illegible]
Central Division																																	
in	C	2.50	.42		.90	.95			75					80												T			.70		T.		7.02
horage	O	1.21	1.26			1.49			.60				T		T		T											T.	.45	.46	.14		5.61
dstown‖	S	.60	2.00			1.00	.90		.50	20			30															.05		1.70			7.25
ling Green	G		2.15			.82	55		.18	.01				35																1.60			5.66
wnsville *	G		2.91			87	.56		.32	.13				48																1.14			6.41
nside‖	C		1.55	T		.53	.87		T.	.45				.85								15								[illegible]			4.85
rollton	O		1.72				.90		.38	.18				.05				T										.06	.07	.32			[illegible]
verport‖	O	.75	1.91	.02		.52	.70		.11	.11				.34			03				01							.02	.46	.99	T.		[illegible]
monton	G	03	22		T.	1.17	T.		.48					30							.06								70	.10	42		3.48
ank	C		1.36	.05		.14	.61		08	38				.42								.08								.62			3.64
nkfort‖	K	.18	2.72	T.		.56	.69		27	.38				.22								.05							T.	1.09			6.16
nklin	G	.54	1.34		.42	1.36			.17				.45	.25							T								.36	.30	.67		5.86
nsburg‖	G		1.66			.49	.63		43	.28				.38			.01					19								.41			4.48
n Bridge	K		2.70	.01		.33	.56		09	.17				.25								11								1.04			5.26
ngton	O	1.76	1.44			1.23			19					.42			T											T.	1.14	80	11		7.09
ction City	K	.43	1.62			1.12	.10		36	.03				.42			.02					21						04	81	[illegible]	31		5.82
chfield	G	3.50	.40			1.43			.25				.38				.05												.79		.68		7.48
ngton ***	K	1.26	.51		08	98			10				03	.23							05	04							41	.22	.06		[illegible]
etto	S	.08	2.00			1.25			60					.04			.10				10								90	.40	.81		6.28
sville***	O	1.57	.66		.07	.99			.54				T	.05			.03				02							.01	49	.39	.11		[illegible]
o (Cherokee Park)	O	.83	1.27			1.14				.45				.06			.04											.04	.25	1.01	.10		5.19
John	S	.08	2.70	01		.90	96		10	.18				.45								T						T	07	79			6.04
t	L	.68	.84			1.01	.11		14				T			T	T								T			.63	.31	.43	.26		4.41
lbyville	S	.33	2.20	T		60	.92		23	.64				.14															.04	.83			[illegible]
lorsville	S	1.11	1.83			1.71			.74					13			.01				T.	T		T					.57	.19	T.		6.29
liamstown	L	.35	1.70	T.		.46	.87		.12	15			T															T	T	.42			4.07
dbury	G		3.20			45	53		.21	T					.33															77			[illegible]
Eastern Division.																																	
ttyville‖	K		.85	.31		.20	87		.04	.08				37								12								[illegible]			[illegible]
ea	K	.12				1.82	.40		.12													.60							64		21		3.91
lettsburg‖	B		.40	.09		.49	48							.17								.06								.53			2.22
mouth	L	.42	2.00			.50	.72		.14	.17				.05													.06	.03	T.	.46			[illegible]
ners	L	.10	.90			.70	54							.20								.10							.10	60			3.24
ard	K																																
kson‖	K		53	.22		.22	1.01		T	.05				.30	T.															.90			3.26
don	C		.85	.14		.40	.70									.35											10			70			3.24
isa	B		.42	.16		.28	.60							.23																.62			[illegible]
nchester	K			.78						.62			10									.12								.68			2.30
ysville‖	O	T.	1.10			.36	.48		T.	.16				.04		T						.04						.02	T	45			2.65
dlesboro	C		.67			.81	.18		.38					.26								.17					.07			.68			3.22
unt Sterling	L		2.10	.10		40	1.40		.08	.11				38								.12					T.		.78		.42		5.89
eville	B		.24			.32	.52							.22													.15			.76			2.21
hmond‖	K		1.40	.60		21	.57		.05	.12				.30								08								1.25			[illegible]
ksbury	B							.20	.95	.18				.40										.60		.10			.15	.70	.31		[illegible]
liamsburg	C		.95	.15		.37	.60		.16	.10				.10								.03					.03			.85			[illegible]

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

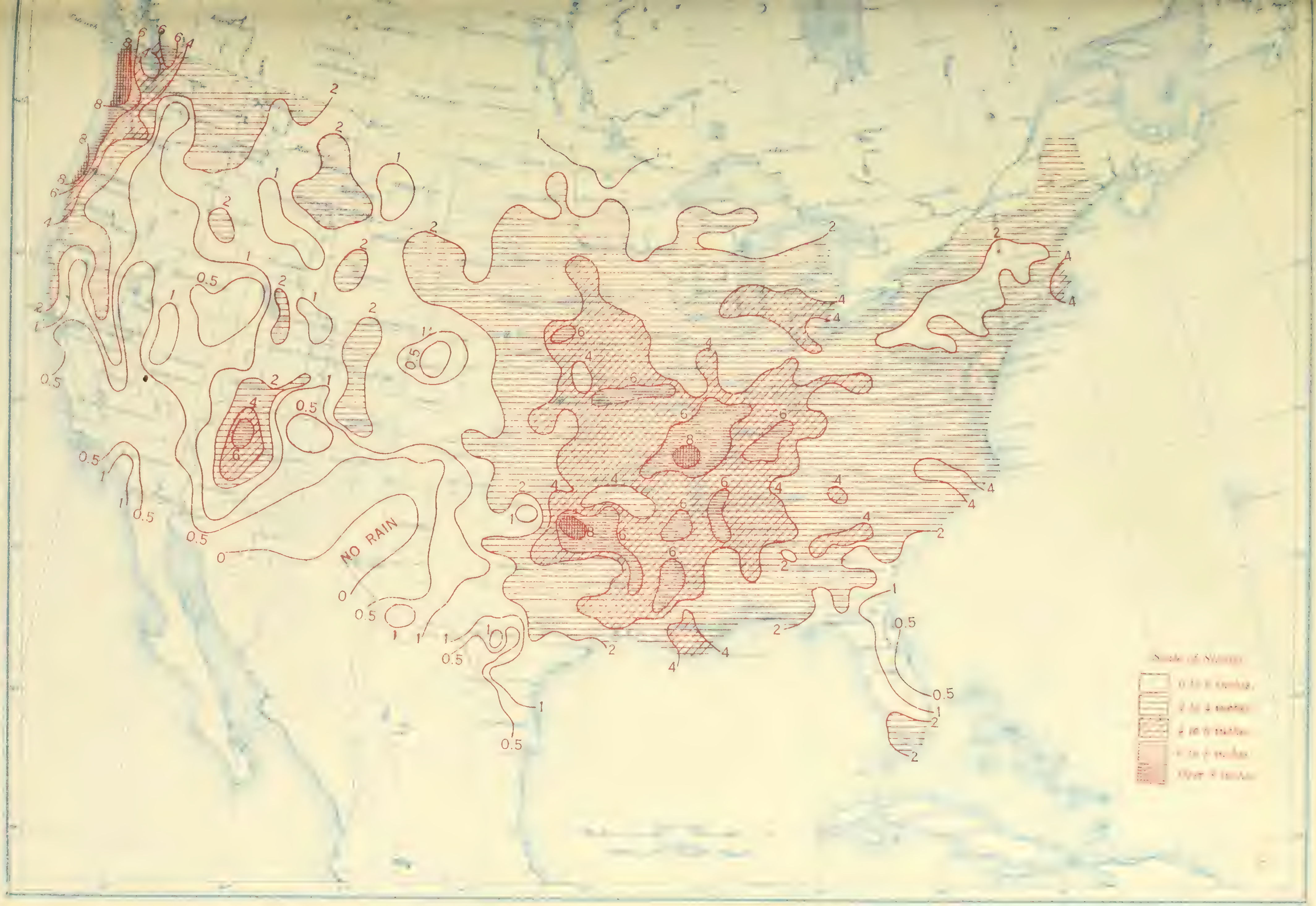
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for April, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	67	47	58	60	49	58	63	45	50	63	74	75	47	50	67	75	84	84	88	80	63	74	80	83	72	66	81	63	67	78	..	67.0
	Minimum	59	40	32	38	44	37	35	41	29	30	33	44	40	31	39	43	48	50	51	60	48	38	46	49	55	45	41	50	48	36	..	42.7
Blandville	Maximum	67	61	59	66	55	60	65	53	51	63	72	72	52	58	65	76	82	83	76	73	68	75	81	82	72	67	79	71	70	76	..	68.3
	Minimum	56	38	35	44	46	38	43	35	30	37	47	54	39	32	45	47	57	61	65	60	46	48	55	60	46	45	51	51	55	49	..	47.2
Calhoun	Maximum	77	61	59	60	58	57	63	59	52	64	75	73	75	57	67	75	84	86	82	78	70	79	85	87	72	69	83	69	68	76	..	70.7
	Minimum	57	38	32	41	37	35	35	33	28	34	45	48	38	28	40	45	51	55	61	62	47	41	42	53	55	42	48	49	54	44	..	43.9
Earlington §§	Maximum	65	47	60	62	48	57	66	43	52	68	77	74	55	60	67	77	85	88	80	81	62	80	79	82	74	70	86	65	72	79	..	68.7
	Minimum	59	40	30	33	45	38	38	42	30	30	36	46	41	30	35	47	49	52	65	65	48	40	39	53	53	46	47	51	52	46	..	44.2
Greenville	Maximum	78	62	59	59	57	56	64	61	49	65	75	74	65	55	65	75	85	..	79	77	..	77	82	84	77	69	85	73	72	79	..	[b]69.9
	Minimum	58	39	30	41	41	36	36	34	30	29	43	46	40	30	38	45	50	..	63	64	..	38	47	55	48	45	52	50	58	46	..	[b]44.0
Hopkinsville §§	Maximum	67	49	60	57	49	58	66	53	54	66	76	71	55	59	69	78	81	86	78	79	68	77	86	86	77	72	86	70	76	79	..	69.6
	Minimum	62	40	32	33	47	37	37	40	30	31	38	43	44	32	34	41	50	52	61	63	48	41	44	50	63	47	50	52	52	50	..	44.8
Marion	Maximum	71	59	60	58	56	57	67	58	51	65	73	71	60	58	65	74	81	84	78	76	68	78	84	83	77	75	82	66	70	74	..	69.3
	Minimum	60	..	..	..	..	..	..	34	29	31	31	37	39	29	39	45	55	55	66	61	45	53	60	62	46	40	47	51	52	48	..	[f]46.5
Mayfield §§	Maximum	66	49	61	58	46	59	67	49	52	56	73	72	53	59	67	78	83	84	79	75	69	77	80	83	76	71	83	78	74	77	..	68.5
	Minimum	56	39	30	31	44	36	36	42	30	33	36	52	41	31	32	39	47	55	58	61	52	39	39	43	52	39	42	51	55	52	..	43.1
Owensboro §§	Maximum	64	50	58	60	49	55	62	40	50	62	73	72	52	54	61	74	81	86	77	79	64	76	82	84	70	64	75	61	64	76	..	65.8
	Minimum	58	39	34	41	45	37	36	40	30	31	40	47	39	32	40	49	49	56	60	62	49	42	51	54	55	44	47	50	50	45	..	45.1
Paducah (Lone Oak)	Maximum	79	68	60	63	59	58	67	64	61	65	74	72	67	59	70	78	84	86	80	78	71	78	85	84	84	70	84	79	72	73	..	72.4
	Minimum	57	39	36	44	40	36	42	35	31	35	37	53	39	34	36	41	58	59	65	62	46	50	55	61	59	45	51	50	57	48	..	46.7
Princeton	Maximum	79	61	61	60	61	59	65	59	52	65	75	74	..	..	..	77	84	86	80	80	72	80	85	84	80	70	86	80	72	78	..	[c]72.8
	Minimum	58	46	30	39	46	44	46	35	30	31	32	47	..	..	..	40	50	53	56	62	46	39	45	50	47	45	51	57	59	48	..	[c]45.7
Russellville §§	Maximum	76	41	59	53	49	50	64	57	48	67	72	67	54	52	70	72	82	84	77	74	66	81	80	87	76	71	85	70	73	79	..	67.9
	Minimum	41	40	30	34	45	36	35	39	29	29	32	46	44	32	34	45	49	54	60	62	47	37	44	52	55	45	50	52	52	49	..	43.3
Central Division																																	
Alpha	Maximum	73	67	60	61	55	52	62	52	50	60	70	71	52	55	63	73	81	81	83	82	70	70	80	81	78	70	81	76	76	75	..	68.7
	Minimum	67	60	35	53	40	37	32	40	31	31	41	49	39	32	34	43	49	57	59	60	53	40	48	51	54	47	52	55	67	52	.	46.9
Anchorage	Maximum	71	59	57	60	57	57	57	48	48	62	71	74	57	53	65	67	81	85	84	75	69	76	84	77	76	64	66	56	67	70	.	66.4
	Minimum	55	38	29	38	36	33	27	31	21	26	36	41	36	27	35	43	47	49	53	65	41	36	44	51	50	42	45	45	48	41	..	40.3
Bardstown §§	Maximum	66	45	61	68	53	58	65	38	51	68	74	79	52	55	69	74	84	88	85	82	62	82	85	86	78	78	79	80	73	75	..	69.8
	Minimum	59	44	31	36	44	35	30	36	25	26	34	42	36	26	32	45	47	51	51	57	48	35	42	50	51	41	41	48	42	43	..	40.9
Bowling Green §§	Maximum	65	46	64	59	51	40	69	55	53	69	78	77	56	52	72	79	87	90	80	80	68	80	88	83	78	74	89	73	78	81	..	70.5
	Minimum	64	45	33	34	41	37	33	40	29	29	40	42	43	32	40	44	50	57	59	62	50	40	45	51	55	48	50	53	53	48	..	44.9
Edmonton	Maximum	75	60	60	63	57	61	65	56	50	65	73	75	60	53	73	75	84	87	80	83	69	70	70	87	82	70	75	85	76	81	..	70.7
	Minimum	58	40	30	36	36	34	30	35	29	28	32	35	30	30	51	46	46	52	50	63	50	49	35	35	45	46	42	50	59	47	..	41.6
Eubank §§	Maximum	75	60	58	63	63	53	63	50	46	63	72	72	48	53	65	72	82	84	83	83	66	72	83	82	80	69	82	80	75	75	..	69.1
	Minimum	55	57	33	38	41	33	27	30	26	25	29	41	39	27	28	39	46	50	55	64	49	33	41	47	51	43	48	47	50	44	..	41.2
Frankfort	Maximum	75	61	56	66	64	51	57	56	44	58	71	73	66	50	63	66	80	85	83	83	78	72	81	78	76	67	64	60	68	72	..	67.5
	Minimum	56	40	29	37	37	35	30	32	24	28	34	40	34	29	34	43	46	49	53	64	50	36	43	51	50	44	46	45	48	44	..	41.0
Franklin	Maximum	69	55	59	58	55	55	65	60	49	64	74	76	59	53	66	75	83	85	79	80	68	72	81	84	78	70	86	74	74	79	..	69.5
	Minimum	58	39	34	41	38	35	36	39	28	31	45	52	40	31	37	45	54	59	63	63	49	41	49	57	57	48	52	52	61	50	..	46.1
Greensburg §§	Maximum	74	47	60	66	55	55	64	45	49	63	74	77	51	54	66	74	83	86	84	82	63	73	82	83	80	69	82	69	74	78	..	68.7
	Minimum	60	46	30	36	43	36	30	39	28	27	34	41	40	29	33	44	44	50	56	61	51	34	41	47	50	44	50	49	50	46	..	42.3
Irvington	Maximum	72	62	58	62	58	52	62	53	47	62	72	75	61	52	63	71	81	84	80	80	68	74	82	82	73	65	71	63	66	75	..	67.5
	Minimum	58	39	34	40	38	36	36	33	27	32	45	52	37	30	42	46	48	56	63	58	47	42	50	53	53	47	47	47	43	45	..	44.7
Junction City	Maximum	71	61	57	67	57	53	61	59	47	62	74	75	64	51	66	71	83	86	84	84	73	74	83	85	81	70	78	65	73	75	..	69.7
	Minimum	57	40	30	33	36	36	28	34	25	24	32	39	36	28	30	44	42	49	55	65	49	33	39	49	49	42	46	46	54	43	..	40.4
Leitchfield	Maximum	71	60	58	63	57	52	62	52	47	64	74	75	60	53	66	73	83	86	81	80	70	75	82	84	75	83	75	69	69	78	..	69.2
	Minimum	57	38	31	39	35	35	32	30	27	29	39	45	38	30	37	45	48	53	58	68	47	37	44	51	52	48	47	48	54	45	..	42.9
Lexington	Maximum	72	61	55	65	54	48	56	44	41	59	69	72	46	47	60	64	79	83	81	81	64	71	78	78	75	62	62	57	67	74	..	64.
	Minimum	57	38	33	42	33	31	31	30	22	34	48	46	34	28	40	40	49	63	65	60	45	45	56	53	51	47	44	43	49	47	..	42.
Loretto	Maximum	83	63	69	68	67	57	63	60	48	62	75	76	73	55	66	72	81	86	83	81	71	75	83	84	83	73	79	69	71	77	..	71.8
	Minimum	55	40	29	33	36	34	29	36	26	29	36	40	37	27	34	45	43	53	60	61	49	35	43	47	52	44	43	47	53	43	..	41.3
Louisville	Maximum	71	60	57	63	53	52	57	46	45	59	71	73	48	52	64	67	81	86	81	80	57	75	82	79	72	62	64	55	66	74	..	65.1
	Minimum	57	40	34	43	38	36	35	31	26	34	45	48	34	29	43	44	51	62	66	57	47	43	57	51	49	46	47	46	49	46	..	44.
Do (Cherokee Park)	Maximum	76	63	56	64	62	54	57	54	47	62	74	73	63	53	64	67	83	88	83	81	76	78	82	79	72	65	65	58	67	71	..	67.9
	Minimum	56	39	30	36	37	34	29	30	22	28	37	45	34	27	39	41	44	52	56	64	48	38	46	49	48	45	45	45	48	44	..	41.
St. John §§	Maximum	65	66	56	63	52	56	59	38	47	60	73	70	50	54	67	70	82	85	81	80	59	74	83	84	76	67	78	60	70	74	..	66.
	Minimum	58	41	32	31	43	35	32	36	26	28	38	43	37	29	32	44	41	42	55	65	46	37	43	50	51	43	47	47	47	44	..	41.4
Scott	Maximum	70	60	56	62	58	47	54	47	46	59	70	66	58	50	60	59	81	87	83	82	73	77	81	74	73	63	53	50	65	65	..	64.
	Minimum	55	39	28	40	35	34	29	29	21	28	40	47	30	25	36	32	45	56	59	62	49	49	52	46	45	42	41	42	46	41	..	40.
Shelbyville §§	Maximum	64	46	56	64	53	54	56	36	46	61	71	76	50	53	64	67	82	86	84	81	55	75	83	82	75	64	66	57	68	71	..	64.9
	Minimum	56	45	30	33	44	34	28	32	19	23	30	41	34	27	30	42	43	52	56	60	47	40	45	52	49	43	45	45	45	43	..	40.
Taylorsville	Maximum	70	60	55	65	59	54	57	53	44	54	71	75	64	50	64	67	81	85	84	81	75	73	81	81	71	66	67	58	69	73	..	66.
	Minimum	57	41	30	37	38	35	28	32	24	27	34	39	38	28	34	45	45	48	51	61	49	33	41	50	51	42	47	47	50	42	.	40.
Williamstown §§	Maximum	64	48	56	67	52	47	66	33	45	60	71	70	47	50	62	64	83	86	84	83	49	78	82	77	65	53	55	59	69	68	..	63.
	Minimum	56	48	30	35	43	35	28	32	20	25	36	47	32	26	30	36	43	52	60	62	49	41	51	50	46	45	42	45	53	43	.	41
Eastern Division																																	
Beattyville §§	Maximum	82	60	60	69	58	50	62	45	50	66	78	78	57	56	64	76	88	90	89	89	68	76	88	88	87	74	80	86	83	82	..	72.
	Minimum	40	56	32	32	45	37	27	28	29	24	29	30	41	26	29	32	40	45	50	55	51	38	39	45	48	47	48	47	56	45	..	39
Berea	Maximum	60	62	63	66	54	51	70	62	60	62	62	62	74	62	65	69	84	87	85	84	72	72	83	84	81	69	76	66	77	76	..	70
	Minimum	36	35	30	43	36	34	29	36	35	25	28	27	38	27	32	43	49	67	62	69	50	35	41	50	52	45	48	47	55	42	..	41
Farmers	Maximum	76	64	58	70	65	45	61	63	46	63	70	72	60	50	57	61	85	86	80	86	78	76	85	76	76	66	57	54	68	71	..	67
	Minimum	57	40	29	32	38	35	21	33	24	23	28	34	36	24	27	37	42	46	49	55	50	33	38	49	48	42	44	44	48	41	..	38
Maysville §§	Maximum	67	61	59	62	57	44	58	47	48	59	74	70	59	54	61	65	85	89	88	88	64	84	85	79	83	67	55	55	72	76	.	67
	Minimum	54	58	30	31	41	34	28	29	22	26	27	30	35	25	25	33	34	42	54	55	51	35	41	51	47	43	43	44	45	40	.	38
Middlesboro	Maximum	77	73	62	63	56	55	65	62	57	64	75	77	70	58	66	75	83	86	85	83	81	75	82	85	83	79	85	83	81	81	..	73
	Minimum	61	46	39	35	40	38	28	44	32	27	31	38	44	29	30	45	46	42	49	55	56	38	40	49	47	51	57	54	61	47	..	43
Mount Sterling §§	Maximum	72	61	56	67	55	46	58	40	43	58	72	74	46	49	62	65	83	85	84	85	62	72	82	78	81	66	64	59	72	73	..	65
	Minimum	58	51	32	35	42	35	28	34	23	26	36	45	35	27	32	41	44	52	58	61	50	34	42	52	49	44	44	44	46	44	..	41
Richmond §§	Maximum	75	55	60	68	60	51	63	47	48	62	72	74	53	63	65	73	83	86	85	86	65	76	84	76	81	68	74	67	72	74	..	68
	Minimum	64	55	32	36	45	35	29	36	25	28	42	50	37	28	38	43	48	61	62	65	50	40	48	50	50	48	48	47	53	47	..	44
Weeksbury	Maximum	75	81	72	64	61	59	57	60	62	62	77	77	68	57	65	80	85	89	89	89	82	86	86	86	87	87	85	85	85	80	.	75
	Minimum	52	44	50	49	37	30	35	40	32	37	34	40	39	28	29	31	40	50	54	61	57	49	41	48	49	51	48	50	54	49	..	43
Williamsburg §§	Maximum	79	66	63	63	56	55	68	50	66	66	78	78	60	68	69	75	86	88	87	86	69	76	83	86	85	76	86	80	81	84	..	73
	Minimum	45	48	31	33	40	38	30	42	30	28	29	39	46	30	31	40	45	48	52	61	52	39	43	43	49	49	48	52	49	51	..	42

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
0
0.5
1
2
4
6
8
Scale of Shading
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

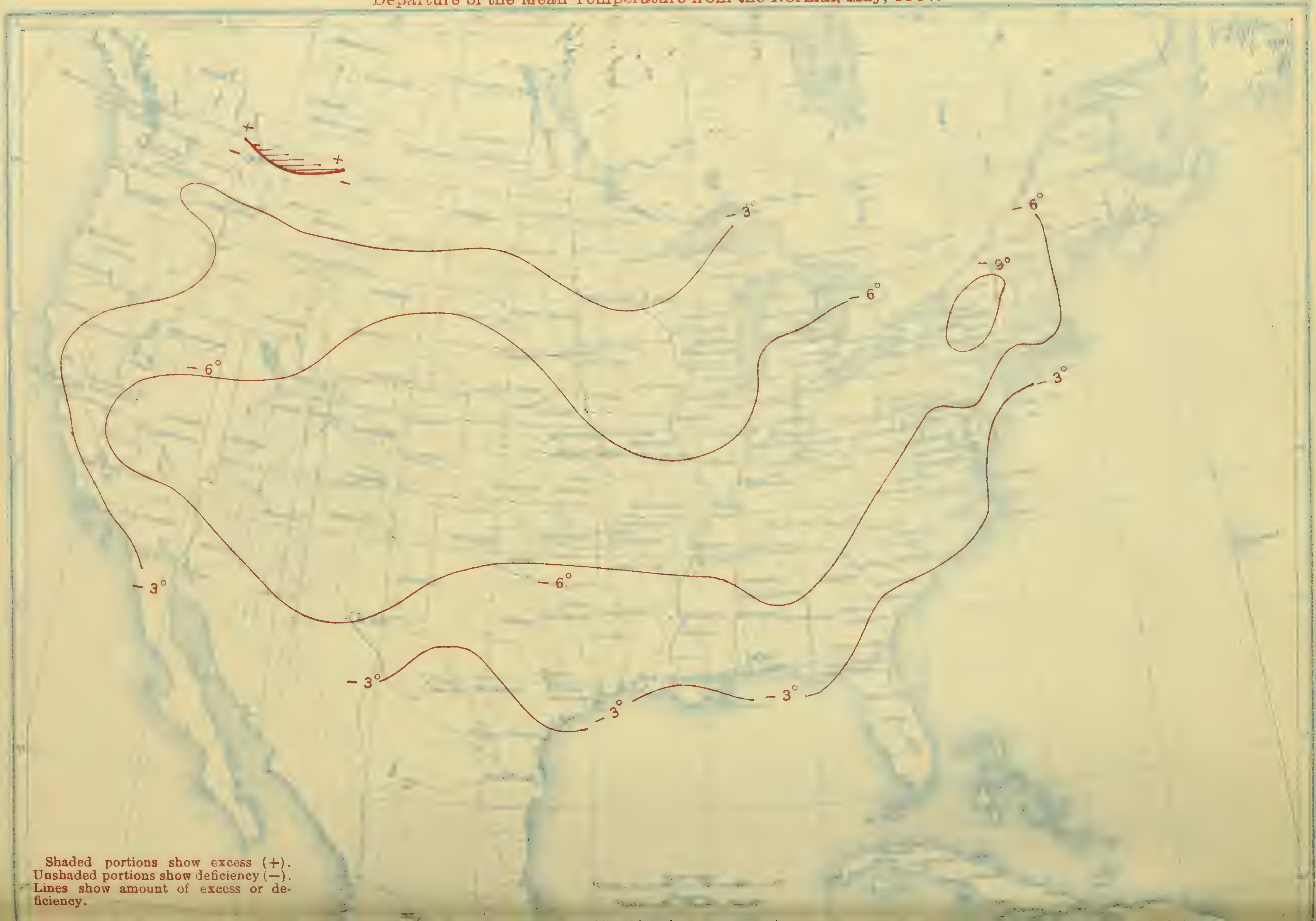
KENTUCKY SECTION

MAY, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 20, 1917

Departure of the Mean Temperature from the Normal, May, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (–).
Lines show amount of excess or deficiency.

J. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XXII. Louisville, Ky., May, 1917. No. 5.

GENERAL SUMMARY.

The temperature conditions that prevailed during the first wo weeks of May, 1917, were not only abnormal and unusual, ut phenomenal, and surpassed all previous records for cold eather in May in this State. The average daily deficiency in mperature at Louisville for this period was 13.4°, and at Lexngton 13.9°. Over the State night temperatures were 15° to 0° below normal, registering below 40° on many nights. howers were frequent and the sky almost continuously overcast uring this period. There were light frosts on several dates, robably most general on the 14th, but no damage of conseuence occurred because of cloudiness and wind. Farm work as retarded by wet soil during the first week, but the cold and rying winds absorbed the moisture rapidly during the second eek, and when the change to warmer occurred on the 15th the eed for rain soon became apparent. The unseasonably cold eather and lack of sunshine caused much corn to fail of germiation, and considerable replanting of that planted during the st days of April and first week of May was necessary. Modrately warm weather prevailed during the period, 16th-22d, esulting in much improvement in crops. Tobacco plants grew owly, but transplanting had begun during the last week. emperatures were unseasonably low again on the 23d and 4th, and were generally below normal during the last decade. n unusual number of destructive wind and hailstorms swept ver various sections of the State. Considered in all its phases, e weather during this month was exceptionally unfavorable r farming and gardening operations.

PRESSURE.

Except for a single low pressure area, which moved from the uthwest over Tennessee and the Ohio Valley during the 3dh, and spread generous rains, high pressure formations domiated weather conditions over the State during all of the first d second decades of the month. Beginning about the 20th, owever, intense low pressure formations moved from the Rocky ountain plateau, or from the southwestern plains states in ose procession over the central valleys, and dominated weather nditions over this section. These general storms, three number, occurred in periods about as follows: (1) A orm formation centered over Kansas and the Middle West the ternoon of the 20th, moved eastward to the upper Ohio Valley d Atlantic states by the morning of the 23d. (2) A storm rmation over Colorado the morning of the 25th moved eastard to the upper Ohio Valley and middle Atlantic states by e evening of the 28th; and, (3) a storm formation centered out Oklahoma the morning of the 30th moved northeastward the northern Lake region by the evening of the 31st. All of ese low areas were attended by more or less heavy rains, understorms and windsqualls, occasioning considerable damge. But the greatest destruction in this State resulted from rnadoes in the extreme western counties in the afternoon of e 27th, when there was great loss of life and property.

The mean sea-level pressure, computed from the records of o stations, was 29.96 inches. The extremes were 29.41 inches the 22d and 30.21 inches on the 14th, both at Louisville.

TEMPERATURE.

The average temperature for the State, based on the reports 41 stations, was 58.9°, which is 6.8° below normal, and the west mean temperature on record for the State. Minimum mperatures during the first two weeks were between 35° and 40° at most stations on several days, and freezing or below at a few stations on the 14th. The extremes were 92° at Bowling Green and Richmond on the 18th, and 30° at Beattyville on the 14th.

PRECIPITATION.

The average precipitation for the State, as determined from the records of 54 stations, was 3.43 inches, which is 0.49 inches below normal. Showers were generally light, but frequent, during the first 12 days. Moderate to heavy rains occurred on the 22d, 26-29th, and 31st. Monthly amounts were somewhat above normal over a belt of northern counties from Jefferson and Bullitt eastward to the Big Sandy; while over the rest of the State they were below normal. At the various stations amounts ranged between 1.34 inches at Manchester and 7.62 inches at Carrollton.

WIND.

The total wind movement at Louisville was 10,231 miles, and at Lexington 10,894 miles, with average hourly velocities of 13.8 and 14.6 miles, respectively. This is the greatest wind movement on record for May at Louisville. The maximum velocity for 5 minutes at Louisville was 61 miles from the south on the 27th, and at Lexington 56 miles from the southwest on the 22d. Maximum velocities of 40 miles or more occurred at Louisville on five days and at Lexington on three days.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 68 per cent, at 2 p. m. 44 per cent, and at 7 p. m. 54 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 61 and at Lexington 41.

MISCELLANEOUS.

May 9.—A windstorm at Louisville and a heavy hailstorm in Fayette County caused considerable damage.

May 22.—Heavy hailstorms caused much damage in Lee and Fayette counties. A damaging windstorm occurred at New Castle. A barn was burned by lightning in Jefferson County.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	63.6	− 2.1	94	28	4.03	+0.11	..
1890	63.9	− 1.8	93	32	4.22	+0.30	..
1891	62.6	− 3.1	90	29	1.78	−2.14	..
1892	64.6	− 1.1	90	36	5.49	+1.57	..
1893	63.2	− 2.5	96	37	5.59	+1.67	..
1894	64.5	− 1.2	99	32	3.54	−0.38	..
1895	63.9	− 1.8	99	29	3.16	−0.76	8
1896	72.2	+ 6.5	106	42	5.34	+1.42	11
1897	61.4	− 4.3	92	32	3.27	−0.65	10
1898	67.6	+ 1.9	93	31	4.52	+0.60	10
1899	68.8	+ 3.1	94	42	4.79	+0.87	11
1900	66.3	+ 0.6	96	29	3.49	−0.43	10
1901	63.7	− 2.0	97	34	2.65	−1.27	10
1902	70.0	+ 4.3	98	35	3.55	−0.37	9
1903	68.0	+ 2.3	98	29	3.09	−0.83	8
1904	65.0	− 0.7	98	33	3.05	−0.87	10
1905	68.0	+ 2.3	95	38	5.23	+1.31	11
1906	69.5	+ 3.8	95	31	2.54	−1.38	9
1907	61.3	− 4.4	93	30	5.07	+1.15	12
1908	66.7	+ 1.0	96	28	4.34	+0.42	12
1909	63.9	− 1.8	93	27	4.64	+0.72	12
1910	61.1	− 4.6	89	30	4.81	+0.89	12
1911	69.4	+ 3.7	105	29	2.46	−1.46	5
1912	66.7	+ 1.0	97	37	4.53	+0.61	10
1913	66.1	+ 0.4	99	29	2.92	−1.00	8
1914	66.5	+ 0.8	103	32	2.16	−1.76	5
1915	65.2	− 0.5	95	35	6.62	+2.70	15
1916	67.2	+ 1.5	98	33	4.02	+0.10	9
1917	58.9	− 6.8	92	30	3.43	−0.49	10

Climatological data for May, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	14	58.9	-7.0	88	16	36	14	42	2.37	-1.41	0.60	0	7	16	5	10	nw.	W. T. Austin.
Blandville	Ballard	445	35	61.0	-5.5	85	31	40	5†	37	2.75	-1.78	0.93	0	8	9	14	8	sw.	E. W. Horr.
Calhoun	McLean	437	13	60.2	-7.4	86	19	36	12	38	3.38	0.00	0.96	0	7	13	11	7	sw.	W. A. Taylor.
Earlington	Hopkins	420	26	61.0	5.8	90	31	35	8†	42	2.26	-2.75	0.94	0	6	17	2	12	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	^{c}59.8	......	85^{c}	19†	36^{c}	14	44^{c}	2.65	......	1.13	0	6	8^{c}	14^{c}	6^{c}	w.	C. R. Lovell.
Hopkinsville	Christian	524	20	60.4	-7.2	86	19†	38	8†	37	2.82	-1.41	1.10	0	5	13	1	17	w.	W. F. Randle.
Marion	Crittenden	571	18	63.6	-3.5	89	27	38	8	32	3.15	-1.14	0.97	0	7	13	7	11	se.	B. C. Paris.
Mayfield	Graves	364	7	59.8	-6.4	86	19†	38	8	39	2.91	-1.44	0.90	0	7	15	4	12	sw.	J. N. Davis.
Owensboro	Daviess	479	20	59.6	-6.7	86	19	38	23	34	4.74	+0.90	2.06	0	12	16	6	9	nw.	Henry S. Berry.
Paducah	McCracken	341	17	62.7	-7.0	89	27	39	8	34	3.26	-0.71	0.88	0	9	18	0	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8																	Dr. J. A. H. Miller.
Russellville	Logan	590	5	58.2	......	85	18†	35	14	36	2.63	......	0.62	0	8	16	10	5	w.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	58.4	-8.2	83	19	33	9	27	2.33	-1.55	0.65	0	7	19	2	10	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	57.0	-7.4	87	19†	33	14	40	4.35	+0.62	1.52	0	10	11	13	7	sw.	C. E. Barret.
Bardstown	Nelson	637	20	58.9	-8.1	90	20	33	14	42	3.32	-0.21	1.23	0	12	11	8	12	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	61.2	-6.4	92	18†	38	14	39	3.00	-1.08	0.92	0	9	10	11	10	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413									2.54	......	0.81	0	9					James H. Young.
Burnside	Pulaski	773	24								2.75	-1.32	0.83	0	9					C. L. Hurt.
Carrollton	Carroll										7.62	+3.63	2.40	0	13					Charlie Oliver.
Cloverport	Breckenridge	375	3								4.01	......	1.25	0	12					W. A. Cockerill.
Edmonton	Metcalfe	600	23	58.8	6.2	85	19†	33	14	39	2.84	-1.58	0.86	0	6	13	12	6	s.	P. W. Ray.
Eubank	Pulaski	1177	22	56.2	-8.0	85	19†	31	14	40	3.09	-0.86	1.24	0	9	10	7	14	w.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	58.3	-6.6	86	19	35	14	36	4.57	+0.76	1.45	0	13	15	6	10	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	61.0	-6.0	86	19†	38	8	33	2.70	-1.35	1.17	0	9	4	18	9	sw.	J. E. Newman.
Greensburg	Green	581	24	58.1	-6.8	87	20	32	14	40	2.70	-1.22	0.73	0	10	4	8	19	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14								2.82	-1.00	1.12	0	11					Miss Lulu Wood.
Irvington	Breckenridge	646	19	60.0	6.3	85	19†	38	23	32	2.51	-0.90	0.76	0	9	14	6	11	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	58.0	-6.5	87	20	35	6	39	2.90	-0.85	1.14	0	9	12	11	8	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	59.2	-6.3	87	19	38	8†	35	2.27	-1.73	1.17	0	7	12	12	7	nw.	John E. Stone.
Lexington	Fayette	989	29	56.9	-7.4	84	19	35	5	32	3.51	-0.01	2.13	0	10	8	11	12	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	60.0	5.7	90	22	33	8	42	2.04	-1.83	1.45	0	6	10	11	10	......	Loretto Academy.
LOUISVILLE	Jefferson	525	44	59.6	-7.1	87	19	38	5	30	4.39	+0.75	2.10	0	14	6	12	13	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	7	58.2	......	89	19	37	12	34	5.38	......	1.76	0	10	8	12	11	nw.	Wm. I. Hunt.
St. John	Hardin	777	20	57.8	-6.9	86	19	32	2	39	3.08	-0.90	1.15	0	12	20	7	4	......	Sisters of Loretto.
Scott	Kenton	900	19	56.8	-7.0	86	20	34	10	31	3.84	-0.22	1.00	0	11	9	6	16	nw.	E. B. Wilson.
Shelbyville	Shelby	825	28	57.6	-7.4	88	19	35	2	38	4.21	+0.20	1.55	0	13	8	15	8	w.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	58.4	-6.1	88	19†	35	14†	41	4.79	+1.32	1.80	0	10	10	6	15	nw.	E. D. Bourne.
Williamstown	Grant	943	14	57.1	-6.0	86	18	35	5	39	6.67	+3.12	3.22	0	13	17	4	10	......	Miss Rose Carter.
Woodbury	Butler	390									2.27	......	0.55	0	8					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	57.4	-6.7	91	20	30	14	48	4.02	-0.13	1.30	0	11	8	7	16	w.	A. H. Bowman.
Berea	Madison	1070	15	58.0	-7.8	88	20	33	14	38	2.00	-1.98	0.89	0	9	16	4	11	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28								5.28	+1.82	2.02	0	10					Forester Farley.
Falmouth	Pendleton	600	28								4.27	+0.69	2.00	0	10	15	4	12	s.	J. V. Oldham.
Farmers	Rowan	668	9	57.6	-6.1	90	20†	31	12†	44	5.32	+1.26	3.10	0	9	19	0	12	w.	Durwood Cassity.
Hazard	Perry		1																	
Jackson	Breathitt	776	5								3.74	......	1.45	0	11					Jas. L. McCoy.
London	Laurel	1190	2								2.46	......	0.60	0	10					C. R. Lee.
Louisa	Lawrence	584	13								3.70	-0.52	2.00	0	10					F. C. Sammons
Manchester	Clay	1400	7								1.34	-1.56	0.32	0	9					Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	57.0	-8.1	90	19†	32	10	42	4.60	+0.55	1.93	0	11	10	9	12	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	58.4	-6.3	88	27	32	14	40	3.25	-0.96	0.80	0	12	17	12	2	w.	B. H. Perkins.
Mount Sterling	Montgomery	930	27	57.8	-6.1	86	19†	36	8	35	4.66	+0.61	1.29	0	13	15	5	11	n.	W. R. McKee.
Pikeville	Pike	634	11								3.54	+0.78	0.82	0	11					I. M. Williams.
Richmond	Madison	926	23	58.6	-6.9	92	18	37	5†	34	2.19	-1.35	0.40	0	12	10	6	15	w.	J. W. Crooke.
Weeksbury	Floyd	1216	3	^{d}59.2	......	89^{d}	19†	36^{d}	14	39^{d}	2.16	......	0.75	0	9	12	8	11	......	O. A. Lund.
Williamsburg	Whitley	939	19	58.8	-7.5	89	19†	35	14	41	3.08	-1.00	0.90	0	10	11	7	13	w.	N. C. Jones.
State averages and extremes				58.9	......	92	18†	30	14	48	3.43	......	3.22	0	10	12	8	11	w.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.

May 27.—Severe storms occurred at many places in the State, being most damaging in the extreme western counties and in the bluegrass region. A storm, tornadic in character, swept over Fulton, Carlisle, Hickman, and Graves counties. This storm moved from the southwest on a line slightly east of the city of Hickman toward Paducah, dying out near the McCracken County boundary. Debris from the places destroyed was deposited in Paducah about 30 minutes after it passed Hickman. The killed and injured in this storm are reported as follows: Fulton County, 42 dead, nearly 200 injured; Hickman County, 18 dead, probably 100 injured; Carlisle County, 3 dead, and about 25 injured; Graves County, 5 dead and about 25 injured. The entire property loss is roughly estimated at one and one-half to two million dollars. Bardwell, the county seat of Carlisle County, was practically destroyed and Hickman suffered severely. Some property losses are estimated as follows: Bardwell, $500,000; Fulton County, $500,000; Hickman County, $400,000. Hail accompanied this storm and caused great damage to crops.

Severe windstorms also occurred in Fayette, Montgomery, Bath, Warren an Franklin counties, causing considerable damage to buildings, timber, fruit trees an crops. The damage was extensive at Lexington, where many buildings were unroofe and a stock barn was burned by lightning with the loss of seven head of horses value at $6,000. Extensive damage by erosion of hillside farm lands occurred in Gran County.

Lightning caused the destruction of a tobacco warehouse at Louisville, with a los of about $200,000. Wind and hail accompanied this storm, damaging trees and crops.

May 31. A barn was burned by lightning and two mules killed in Jefferson County.

Rivers: Good stages prevailed during the month in the streams of the State excep in the southeastern counties, where the rainfall was deficient. The Ohio rose rapidl from the 27th to the end of the month.

ERRATA.—April, 1917.—Greensburg: Monthly mean temperature should be 55.5

Daily Precipitation for May, 1917.

Stations	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division																																
aver Dam G	.19		.06	T				T			T											.58	.40			.10		.60	.10			[illegible]
andville M			.32	.60			.04				T										.06	.58				.48	.38	.28		T.		[illegible]
houn G			.16	.96			T	T	T	T.	T										.08	.82				T	.11	.80			.12	[illegible]
rlington G				.57	.02																	.91	.23			T		.47	T.		.03	[illegible]
eenville G			.06	.41							.04											1.13					.20	.81				[illegible]
pkinsville C	.40			.40																		.62	T			.30		1.10				2.82
rion O			.10	.44																	T	.76				.43	.97	.33		T.	.12	3.15
yfield M	.14			.90								.15										.80	.11			.28		.50				2.91
ensboro O	.28		.03	.54	.03		T	T.	.06	.05	.03	T.									T	.60	.06			.35		2.06	T.		[illegible]	[illegible]
ducah O	.25		.30	.56			.02				.08											.88				.67	.18	.32				[illegible]
nceton G																																
ssellville G	.29			.58																	.62		.03			.29	.13	.61			.08	[illegible]
Central Division.																																
ha C				.63			.16			.15	.35											.65				T.	T.	.20		.25		[illegible]
chorage O			.13	.19				T	.09	.04	.11										T	.52				.05	1.52	.94			.76	4.35
rdstown S	.08			.26						.12	.07	.03										.19	.75			.06	.66	1.23	.15		.52	3.32
wling Green G	.20			.78					.05			.25										.65				.02		.92	.08		.05	3.00
wnsville G	.27			.56					.02	.07												.61				.01		.81	.11		.08	2.54
rnside ‖ C	.17			.40				.12		T.	.12	T.		T.								.58	.18					.83	.13		.22	2.75
rrollton ‖ O	.08		T.	.44				.02				.14	.26	.30	.11							.27	.47				2.40	2.20	.35		.58	7.62
verport ‖ O	.11		.01	.65	.05				.18	T	.02	.02										.50	.03			T.		1.25	.12		1.07	4.01
nonton G				.66			T.			.10	.10											.84						.86			.28	2.84
bank C	.18			.23	.02						.13											.38	.23					1.24	.40		.28	3.09
nkfort ‖ K	.10			.15	.02				.05	.05	.21	.18										.30	.41				1.12	1.45	.22		.31	4.57
nklin G			.05	.30				.07	T.		.13										T.	.74				.03	.15	1.17		T.	.06	2.70
ensburg ‖ G	.31			.43	.01					.03	.03											.50	.45					.73	.12		.09	2.70
h Bridge ‖ K	.10			.14	T.					.30	.18	.01										.27	.24				.07	1.12	.18		.21	2.82
ington O		T.	.08	.17			T.	T.	.09	T.	.06										.07	.53				.07		.68			.76	2.51
ction City K	.15		.10	T.	T		T.	T.	.09	.12	.05	T.										1.01					T	1.14	.07		.17	2.90
chfield G				.34				.04		T.	.05											.44					.90	.27			.23	2.27
ington *** K		.02	T.	.14				.04	.03	.07	.15		T.									.51				T.	2.03	.36		T	.16	3.51
etto S	.01	T.		.05				T.		.02	.01											.50					T.	1.45		T	T	2.04
isville*** O		.03	.16	.19				.01	.09	.15	.09										.01	.50				.11	2.02	.02		.62	.99	4.39
o. (Cherokee Park) O	.10		.04	.41					.12	.15	T.										T.	.57				.03	1.76	1.14			1.06	5.38
John ‖ S	.20		T.	.33					.05	.06	.11	.18										.22	.10			.08	T.	1.15	.18		.42	3.08
tt L	.03		T.	.76	.03	T.		.10	T.	T	.05										T.	.52		.03		.15	.89	1.00			.28	3.84
lbyville ‖ S	.11		.04	.30	.05				T.	.05	.15	.13										.18	.05				1.08	1.55	.17		.35	4.21
lorsville S			.02	.34				.03	.18	.04	.05		T.									.47				T.	1.17	1.80	T.		.69	4.79
liamstown ‖ L	.33			.22	.22				.05	.17	.07	.17										.22	.12	T			3.22	1.45	.23		.20	6.67
dbury G	.55			.46						.04		.05										.49	.03					.61	.04			2.27
Eastern Division.																																
ttyville K	.45			.15	T			T.	.10	.25	.20	T.										.45	.25				.20	1.30	.65		.02	4.62
ea K	.10			T	.12		T.		.33	.12			T.									.21					.08	.89	.04		.11	2.00
ettsburg B	.14							.14	.05			.20		.07								.11	.71				2.02	1.37	.47			5.28
mouth L				.28	.20						.10	.03										.23	.17				2.00	.95	.16		.15	4.27
mers L	.16				.10						.20	22										.17	.17				3.10	1.05	.15			5.32
ard ‖ K																																
kson ‖ K	.30			T	.08			.02	.12	.42	.20											.35	.13				.42	1.45	.25		T	3.74
don ‖ C	.10			.35				.10		.05	.17											.30	.60					.44	.05		.30	2.46
isa B	.05							.14	.05			.24		.09								.14	.41				.48	2.00	.10			3.70
chester ‖ K				.09				.21	.09	.16	.11	.07										.32							.21		.08	1.34
sville ‖ O	.03			.06	.10				T.	T.	T.	.16		.05								.21	.25	T.			1.50	1.93	.19		.12	4.60
dlesboro C	.12			.31			.24	.05		.09	.25		.05									.56	.42				.80	.20			.16	3.25
nt Sterling ‖ L	.42		T.	.08	.07	T.			T.	.17	.21	.26	T.	.03								.25	.56				1.29	.94	.26		.12	4.66
eville ‖ B	.32							.32	.18	.22	.08	.12										.32	.82				.62	.18	.36			3.54
mond ‖ K	.20			.20	T		T.		.05	.20	.20											.30	.05			.02	.15	.40	.30		.12	2.19
ksbury B						.10	.10		.10		.15		.05									.50	.09				.75	.32				2.16
liamsburg ‖ C	.44			.33	T.	T.	T.	.30		T.	.13	.05		T.								.40	.90					.28	.05		.20	3.08

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖. Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

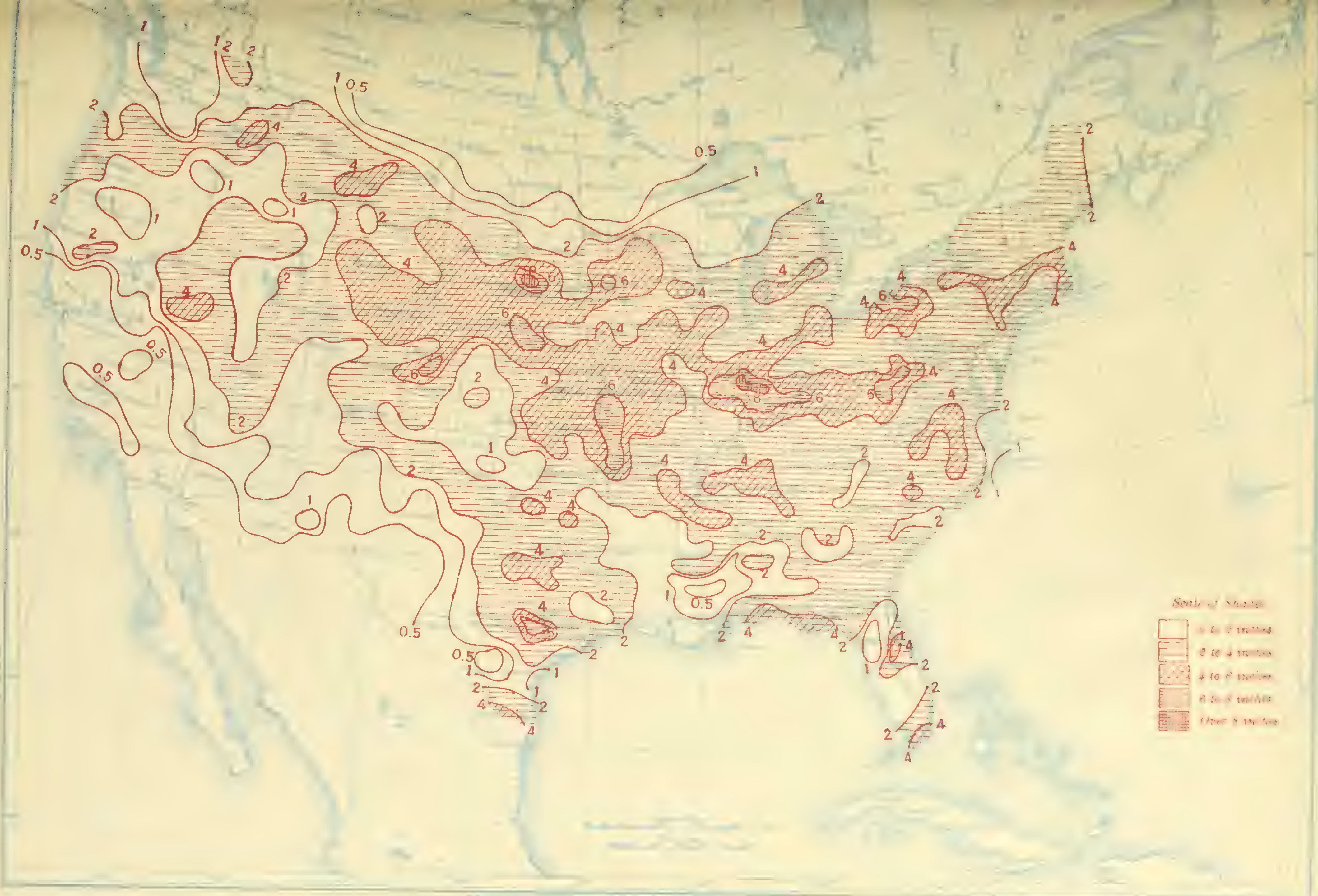
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for May, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division																																	
Beaver Dam §§	Maximum	62	66	56	52	55	54	57	62	70	68	62	61	60	66	78	88	87	83	84	80	82	82	62	73	75	84	75	60	75	79	84	70.4
	Minimum	44	39	46	44	39	41	40	47	41	44	43	38	39	36	40	46	50	53	63	57	59	62	37	41	49	53	72	49	46	49	61	47.4
Blandville	Maximum	64	69	60	59	53	57	55	65	70	70	67	65	67	69	76	79	81	83	84	82	82	74	65	74	71	83	78	68	74	80	85	71.2
	Minimum	41	46	49	42	40	40	43	40	43	51	51	42	44	55	44	50	44	59	61	60	69	49	40	49	57	61	66	54	51	64	66	50.7
Calhoun	Maximum	72	70	62	51	57	58	58	65	71	72	68	67	64	70	80	84	84	84	86	84	80	79	64	74	77	84	81	68	79	78	85	72.8
	Minimum	44	41	47	43	38	43	41	37	41	45	47	36	39	38	42	47	48	50	60	56	62	50	37	48	50	56	66	53	48	58	61	47.7
Earlington §§	Maximum	66	73	57	54	57	59	60	60	72	72	68	68	67	70	81	85	86	88	89	89	83	75	66	75	78	85	81	60	80	82	90	73.4
	Minimum	45	40	48	47	42	42	41	35	40	46	45	35	36	36	39	46	48	58	63	60	63	63	38	48	54	58	69	58	47	54	62	48.6
Greenville	Maximum	78	68	62	55	56	57	56	64	72	71	68	65	62	77	..	84	82	83	85	..	..	84	65	73	74	84	82	74	77	79	85	^{c}72.2
	Minimum	44	41	49	47	39	43	41	40	40	48	46	37	39	36	..	40	49	54	61	..	..	52	38	47	51	56	67	54	46	57	65	^{c}47.4
Hopkinsville§§	Maximum	66	70	60	57	58	57	57	66	72	70	67	65	65	68	79	83	84	84	86	84	83	76	66	74	73	84	80	60	76	79	86	72.1
	Minimum	43	42	48	49	41	42	43	38	42	45	46	40	42	38	42	46	49	55	60	59	63	64	40	44	52	58	63	58	47	52	61	48.8
Marion	Maximum	63	70	61	59	56	56	56	64	71	70	66	64	68	68	79	82	83	84	85	83	81	76	76	73	73	83	89	69	75	79	84	72.5
	Minimum	42	58	54	40	50	42	42	38	44	57	50	47	41	41	47	70	66	59	63	61	76	65	56	63	62	61	69	58	55	64	64	55.0
Mayfield §§	Maximum	65	71	61	60	60	48	56	67	72	72	66	67	69	69	79	81	83	85	86	81	85	72	65	73	74	83	80	67	75	81	86	72.2
	Minimum	40	42	43	49	41	40	42	38	39	43	49	42	41	39	41	44	44	56	56	56	57	63	39	41	47	57	63	56	48	48	62	47.3
Owensboro §§	Maximum	60	65	53	49	57	56	57	62	69	69	63	62	59	66	79	81	83	84	86	84	80	74	62	72	74	83	81	60	73	77	81	69.7
	Minimum	45	42	49	45	40	42	42	41	41	48	49	39	43	43	45	50	52	57	60	57	63	63	38	47	51	55	63	57	49	58	59	49.5
Paducah (Lone Oak)	Maximum	68	69	68	59	58	57	57	65	70	71	71	64	66	69	79	83	84	87	88	86	86	85	66	75	72	86	89	69	76	78	87	73.8
	Minimum	41	47	50	44	40	42	43	39	44	52	50	56	43	43	45	54	57	62	62	60	69	51	40	48	57	61	66	54	52	61	67	51.6
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville§§	Maximum	67	69	59	53	51	52	56	54	68	69	66	64	57	67	66	81	84	85	84	85	83	75	62	72	71	80	80	59	77	79	85	69.7
	Minimum	43	39	39	48	40	41	42	39	41	42	45	39	39	35	37	46	48	54	54	58	59	61	38	45	47	54	60	57	47	53	62	46.8
Central Division																																	
Alpha	Maximum	60	57	64	60	53	51	47	55	65	63	63	57	55	60	70	73	77	80	83	81	81	72	63	67	70	75	70	60	68	77	79	66.3
	Minimum	46	45	46	53	40	40	43	40	33	49	44	42	44	37	46	46	51	57	67	69	68	63	44	51	57	60	53	56	52	54	65	50.4
Anchorage	Maximum	61	65	55	48	49	49	59	63	64	67	56	62	59	68	78	80	84	85	87	87	80	75	59	70	73	84	80	65	74	78	83	69.3
	Minimum	44	35	45	41	37	41	37	36	35	39	44	34	36	33	38	45	46	56	55	57	57	45	37	47	45	55	60	55	44	52	59	44.8
Bardstown §§	Maximum	64	72	58	53	51	56	55	66	70	72	63	64	58	70	80	84	86	86	88	90	83	76	64	73	80	83	83	63	78	80	85	72.1
	Minimum	39	38	47	44	39	41	40	39	36	41	44	37	37	33	38	44	45	50	52	58	55	60	38	44	48	52	59	58	46	54	61	45.7
Bowling Green§§	Maximum	68	72	66	56	60	56	57	65	72	73	66	65	65	72	82	86	85	92	92	90	82	75	65	76	77	92	90	60	81	80	89	74.4
	Minimum	44	41	43	48	40	41	43	40	41	47	45	39	41	38	44	50	50	55	56	58	56	62	40	45	53	53	58	57	49	53	60	48.1
Edmonton	Maximum	76	68	69	57	57	54	53	62	68	71	63	62	63	67	77	80	82	83	85	85	84	71	62	68	74	76	82	75	83	79	84	71.6
	Minimum	39	35	38	47	39	39	43	37	38	67	45	40	38	33	38	44	46	48	50	54	54	55	39	44	46	44	66	55	55	51	62	46.1
Eubank§§	Maximum	61	68	63	63	46	49	49	60	63	65	60	59	55	65	74	79	81	83	85	85	85	78	61	71	74	80	82	62	72	79	81	69.0
	Minimum	43	36	39	42	37	37	39	35	39	40	44	37	33	31	35	41	43	43	53	56	51	58	40	40	49	52	55	58	50	40	53	43.5
Frankfort	Maximum	71	65	64	55	49	51	55	61	62	66	61	61	58	66	76	79	82	84	86	85	84	81	66	70	72	82	83	69	72	77	83	70.1
	Minimum	45	60	37	43	37	38	40	41	39	40	44	37	38	35	40	45	47	48	52	58	55	59	40	48	49	52	59	57	48	52	60	46.5
Franklin	Maximum	68	68	65	57	56	55	54	62	69	72	64	63	62	66	77	81	83	85	86	86	86	77	64	73	75	86	83	76	75	80	86	72.3
	Minimum	42	42	51	48	40	41	42	38	41	50	47	39	41	39	44	52	56	57	59	61	62	50	39	46	54	58	68	57	56	56	64	49.7
Greensburg§§	Maximum	62	68	62	52	51	54	55	62	69	69	69	63	60	67	77	81	83	84	86	87	84	77	63	72	71	82	83	63	74	79	83	70.7
	Minimum	45	37	49	46	39	42	41	35	37	45	45	34	39	32	37	42	43	45	48	52	52	60	40	43	49	52	68	58	46	51	59	45.5
Irvington	Maximum	69	65	58	51	53	52	55	61	68	70	62	62	58	66	77	80	82	83	85	85	80	76	62	71	76	83	82	78	74	77	83	70.5
	Minimum	45	41	48	45	39	44	41	41	40	49	49	39	42	39	45	51	54	59	62	62	63	55	38	48	53	55	65	56	47	59	62	49.5
Junction City	Maximum	69	65	59	60	51	52	55	62	63	67	61	60	55	66	76	80	82	80	86	87	83	82	64	71	80	82	83	84	74	78	80	70.9
	Minimum	43	40	45	45	38	35	39	36	42	38	46	36	38	39	48	52	46	47	47	55	51	56	39	47	53	47	48	55	51	48	50	45.2
Leitchfield	Maximum	67	67	58	53	55	52	55	62	70	71	66	63	57	67	76	81	83	84	87	86	83	80	62	73	77	84	82	69	76	80	85	71.3
	Minimum	43	40	48	44	39	43	40	38	39	45	46	38	42	39	47	46	48	53	54	57	58	45	38	46	48	53	66	54	45	55	65	47.2
Lexington	Maximum	58	62	55	54	43	48	51	58	57	63	58	55	51	62	73	77	80	82	84	83	80	74	58	67	68	79	79	62	69	77	81	66.1
	Minimum	42	44	44	35	35	37	38	39	41	43	44	36	38	41	48	56	59	61	62	64	64	42	39	48	53	52	55	52	50	56	62	47.7
Loretto	Maximum	79	67	74	55	53	52	55	66	73	69	63	64	61	69	78	83	83	85	88	85	85	90	64	73	75	84	85	78	75	80	81	73.3
	Minimum	44	47	37	44	39	40	48	33	38	43	44	35	39	34	44	44	41	49	57	60	59	58	38	50	53	52	63	55	48	51	64	46.8
Louisville	Maximum	60	65	55	48	50	49	55	62	65	66	63	60	55	66	78	81	83	85	87	86	79	73	61	70	72	82	80	60	74	77	82	68.7
	Minimum	41	45	47	38	39	43	40	42	42	47	46	40	42	44	52	61	62	64	64	67	66	43	40	52	55	54	60	56	53	58	60	50.5
Do. (Cherokee Park)	Maximum	71	64	61	50	50	50	55	61	63	55	64	61	57	67	78	80	83	86	89	88	77	76	62	70	71	82	79	65	70	78	83	69.2
	Minimum	43	39	45	42	38	42	38	39	40	42	45	37	39	38	44	49	51	56	58	62	62	51	39	49	49	51	60	54	48	55	59	47.2
St. John §§	Maximum	63	63	54	52	52	55	55	64	71	73	62	64	56	67	77	82	84	84	86	85	82	75	64	73	78	83	82	61	74	77	84	70.4
	Minimum	43	32	43	44	39	41	37	39	35	46	46	35	40	35	41	47	45	50	52	55	56	60	36	47	50	52	52	52	40	54	60	45.3
Scott	Maximum	66	62	58	53	44	46	51	62	57	64	64	55	55	67	78	80	85	83	85	86	77	76	59	68	69	74	76	62	72	72	80	67.3
	Minimum	42	38	40	40	36	39	39	39	35	34	45	36	40	40	47	53	56	57	64	65	58	53	39	46	43	45	57	52	47	50	59	46.3
Shelbyville §§	Maximum	61	65	56	50	49	50	57	63	65	68	64	61	58	69	79	81	55	85	88	87	78	75	63	72	74	83	79	62	74	77	82	69.7
	Minimum	42	35	42	42	36	39	39	38	39	40	45	36	38	36	42	43	50	54	50	58	58	60	37	42	48	52	52	57	47	51	58	45.4
Taylorsville	Maximum	73	66	49	44	49	50	56	61	66	69	63	60	57	66	76	81	84	87	88	88	82	76	62	72	74	83	82	67	74	77	85	69.9
	Minimum	41	36	57	52	38	41	42	49	38	40	45	38	40	35	35	43	43	47	52	57	54	53	39	50	50	52	62	56	51	54	61	46.9
Williamstown §§	Maximum	60	64	59	47	44	48	55	61	60	66	63	58	55	68	77	80	85	86	82	80	79	77	60	69	71	82	80	60	72	74	81	67.8
	Minimum	43	40	43	42	35	38	37	38	36	39	44	36	37	37	41	51	55	60	61	60	64	58	38	42	46	50	55	57	47	53	54	46.4
Eastern Division																																	
Beattyville §§	Maximum	65	70	62	71	47	56	55	61	65	68	62	57	52	65	78	80	86	88	90	91	80	81	65	72	75	87	71	66	75	81	86	71.2
	Minimum	46	38	45	44	40	40	40	42	44	40	42	41	36	30	32	39	42	43	42	52	49	51	43	40	47	44	50	57	51	46	53	43.5
Berea	Maximum	75	66	64	60	50	48	50	58	65	64	58	58	53	63	74	75	85	85	85	88	84	73	70	71	74	75	85	70	72	79	82	69.6
	Minimum	43	37	38	38	38	40	42	42	43	43	41	40	38	33	40	42	47	65	64	60	61	59	38	41	45	48	51	54	52	56	61	46.3
Farmers	Maximum	79	69	66	65	58	52	48	58	64	63	62	69	59	63	70	72	85	88	89	90	90	85	68	72	74	75	84	75	75	71	84	71.7
	Minimum	44	33	45	45	38	40	34	33	35	34	41	31	34	31	35	39	43	46	45	60	75	55	41	42	42	41	57	55	51	44	60	43.5
Maysville§§	Maximum	61	66	62	58	45	50	55	63	63	63	64	57	55	68	79	83	87	79	90	90	87	82	62	71	72	84	84	68	72	76	83	70.3
	Minimum	44	37	41	43	38	38	35	40	35	32	36	38	37	33	39	47	51	47	51	63	54	59	41	42	41	42	52	55	48	46	48	43.
Middlesboro	Maximum	76	71	73	74	65	51	50	55	65	66	69	65	56	63	73	76	81	84	85	85	84	81	66	67	74	78	88	72	71	77	77	71.5
	Minimum	47	38	44	46	40	42	40	40	39	42	52	42	36	32	35	39	41	44	45	47	49	60	43	39	44	49	62	59	55	48	61	45.2
Mount Sterling§§	Maximum	60	63	57	65	46	49	54	61	62	65	60	55	53	64	74	78	82	85	86	86	85	79	61	70	71	83	84	66	71	76	82	68.
	Minimum	43	38	45	44	37	39	38	36	37	46	42	45	38	37	45	51	53	54	57	60	58	59	40	42	48	48	56	55	49	49	60	46.7
Richmond §§	Maximum	60	66	60	63	45	48	56	64	62	67	59	59	57	67	78	79	87	92	82	85	80	72	62	68	70	82	80	65	70	72	82	69.
	Minimum	43	41	45	46	37	39	40	37	41	41	46	38	38	37	44	51	54	58	60	62	65	60	40	45	51	51	55	57	51	55	62	48.
Weeksbury	Maximum	71	69	65	77	70	56	51	52	65	64	64	54	54	64	70	80	85	87	89	89	87	88	73	72	77	86	86	..	..	..	..	^{d}72.
	Minimum	47	41	45	48	41	41	40	42	43	43	43	42	37	36	42	46	50	48	52	58	56	56	44	44	54	47	67	..	..	..	..	^{d}46.
Williamsburg §§	Maximum	64	71	71	74	54	52	49	60	63	65	67	60	54	65	75	78	82	87	89	89	87	81	62	71	75	82	84	66	74	81	82	71.
	Minimum	46	40	44	49	40	41	41	43	41	41	45	40	38	35	36	41	44	46	49	53	54	57	44	44	49	51	58	62	59	48	54	46.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shading
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

OF THE
UNIVERSITY OF ILLINOIS

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

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JUNE, 1917

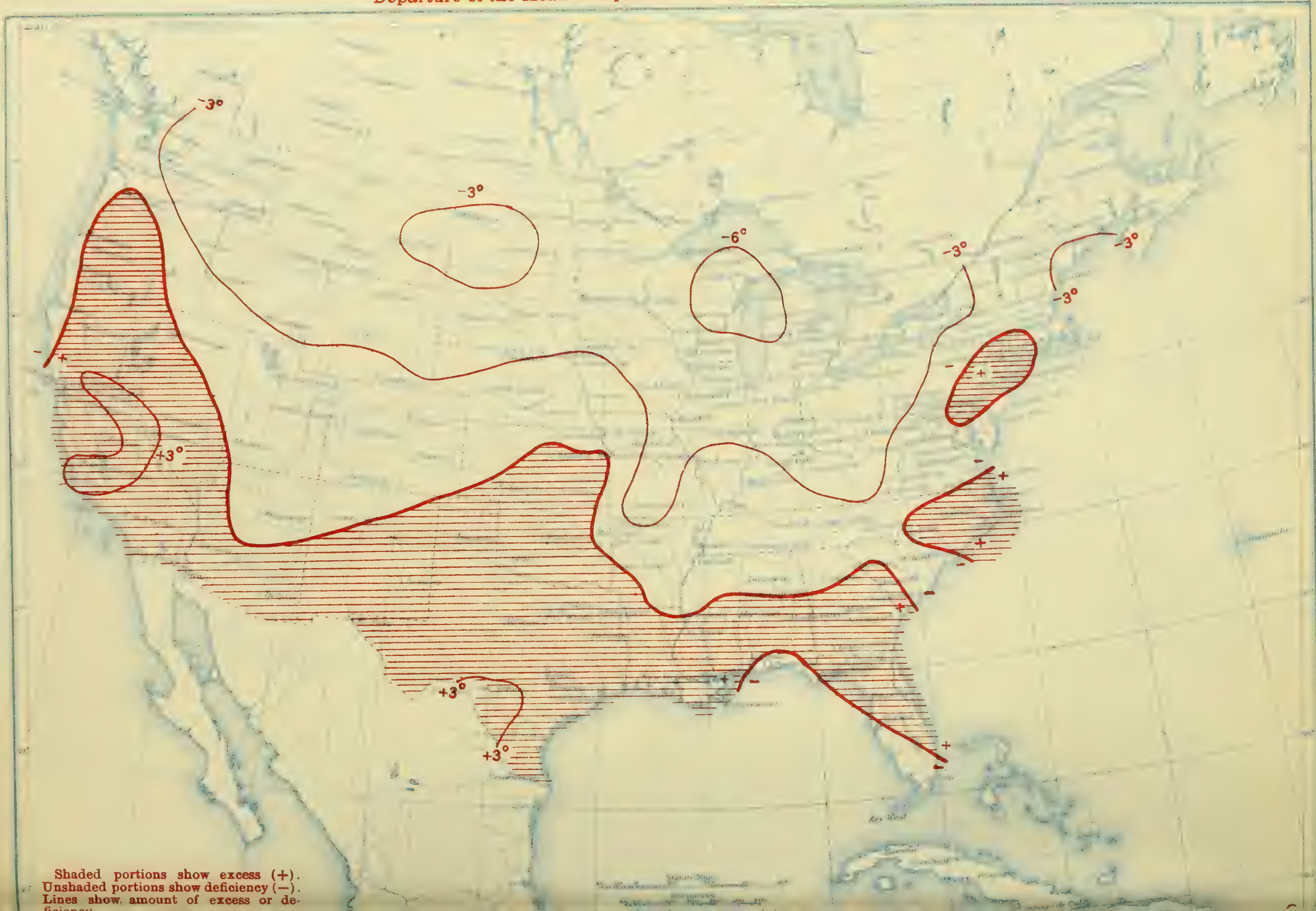
BY

FERDINAND J. WALZ

PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 24, 1917

Departure of the Mean Temperature from the Normal, June, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or de-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXII. Louisville, Ky., June, 1917. No. 6.

GENERAL SUMMARY.

Continuous rains during the first decade and temperatures generally below normal during the first three weeks produced conditions unfavorable for the growth of vegetation. The period, 14-17th, was exceptionally cold for June, mean temperatures registering from 11° to 23° below normal. During the first two weeks the soil was generally too wet for cultivation, and crops became very weedy. Because of the unfavorable temperature conditions, the excessive rainfall, and the general lack of sunshine, many garden plants seemed stunted and field corn made slow progress. These conditions seemed to favor the development and spread of the green aphis, or plant louse, which in some instances actually killed potatoes and greatly injured tomatoes, beets, turnips, and other garden plants. However, the cool wet weather was favorable for transplanting tobacco, and farmers had no difficulty in setting out the crop. During the last two weeks the soil was dry enough for cultivation, which proceeded rapidly, the crops being reasonably clean and quite well cultivated by the end of the month. With favorable temperature and good showers plant growth was rapid during the last week; and the month closed with farm work well in hand and crops in promising condition, though still somewhat backward and late.

PRESSURE.

Well developed areas of low pressure, attended by general rains over the State, passed northeastward across the central valleys during the 1st-2d, 5-7th, and 8-10th. About the 11th high pressure areas built up over the eastern and southeastern states, and continued to dominate weather conditions in this section until the end of the month. After the 11th no low pressure area of consequence passed near the State, and the rains that occurred were light and scattered.

The mean sea-level pressure, based on the reports of two stations, was 30.04 inches. The extremes were 30.41 inches on the 17th, and 29.64 inches on the 9th, both at Louisville.

TEMPERATURE.

The average temperature for the State, based on the reports from 41 stations, was 70.9°, which is 2.0° below normal. Real summer maximum temperatures occurred only during one week, 22d-28th, and on the 13th, the highest being 100° at Earlington on the 26th. During the period 15-17th, minimum temperatures were generally in the 40's. The lowest, 39°, was registered at Beaver Dam and Berea on the 16th, and at Junction City on the 17th.

PRECIPITATION.

The average precipitation, based on the records of 53 stations, was 4.30 inches, which is 0.08 inches above normal. During the first decade, rains occurred on nearly every day and were heavy on the 2d and 9th. Showers occurred on the 14-15th, 20th-21st, 24th, and 28-29th. The distribution over the State was irregular, but in the main the rainfall was heaviest over the blue grass region and the south-central counties, where amounts ranged from four to six inches; while it was lightest over the southwestern and north-central counties, amounts ranging from three to four inches. At the various stations amounts ranged between 2.59 inches at Owensboro and 6.71 inches at Jackson.

WIND.

The total wind movement at Louisville was 7,893 miles, and at Lexington 8,406 miles, with average hourly velocities of 11.0 and 11.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 44 miles per hour from the west on the 28th, and at Lexington 60 miles from the southwest on the 1st.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was [illegible] per cent, at 2 p. m. 49 per cent, and at 7 p. m. 56 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 73 and at Lexington 57.

MISCELLANEOUS.

June 1.—Windstorms caused considerable damage to timber, buildings, and telephone systems in Scott, Bourbon, Pendleton, Fayette, Shelby, Todd and Hopkins counties. The damage was especially heavy and extensive at Lexington. A tornado in Graves county wrecked the town of Viola and injured 11 persons. A negro farm hand was killed by lightning near Hopkinsville, and a barn was burned by lightning near Versailles.

June 6.—A tornado killed five persons and injured 20 at the town of Bevier, Muhlenburg County. It moved nearly due east into Ohio County, killing two young men in the Green River bottoms. The path of the storm was 50 to 75 yards in width. One person was killed and seven injured by a windstorm in Hardin County. Eight head of high grade cattle were killed by lightning in Bourbon County.

June 9.—A stock barn was burned by lightning near Franklin.

June 21.—A child was killed by lightning near Fullerton, Greenup County.

June 22.—The Y. M. C. A. building at McRoberts, Letcher County, was burned by lightning.

June 28.—A man was shocked and burned by lightning at Louisville, when he answered a telephone call during a severe thunderstorm. The jail at Louisville was damaged by lightning. A boy sitting in a chain swing was killed by lightning at Corbin.

Rivers:—Good stages prevailed in the Ohio at the beginning of the month, and the rains of the 1st-2d caused a further rapid rise. The lower river nearly reached flood stage at Evansville on the 4th. Stages declined rapidly after the 12th, reaching pool stages at most points above Louisville by the 20th.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25 year normal.	Highest.	Lowest.	Monthly average.	Departure from 25 year normal.	No. of days with .01 in. or more.
1889	70.6	−3.3	99	38	5.27	+1.05	
1890	78.4	+4.5	101	51	4.96	+0.74	
1891	77.1	+3.2	97	51	4.48	+0.26	
1892	75.8	+1.9	101	48	4.23	+0.01	
1893	73.3	−0.6	97	46	4.64	+0.42	
1894	75.6	+1.7	102	35	2.69	−1.53	
1895	75.9	+2.0	104	47	3.63	−0.59	
1896	73.5	−0.4	98	46	4.64	+0.42	10
1897	73.4	−0.5	101	41	3.61	−0.61	9
1898	76.2	+2.3	101	45	3.90	−0.32	9
1899	76.1	+2.2	100	44	2.80	−1.42	8
1900	73.9	0.0	100	40	6.14	+1.92	14
1901	75.6	+1.7	104	42	3.97	−0.25	9
1902	73.4	−0.5	101	39	4.75	+0.53	11
1903	68.6	−5.3	96	37	3.61	−0.61	10
1904	73.2	−0.7	99	48	3.14	−1.08	11
1905	74.8	+0.9	106	45	4.49	+0.27	10
1906	73.9	0.0	99	42	4.53	+0.31	[illegible]
1907	70.2	−3.7	95	41	4.91	+0.69	11
1908	73.4	−0.5	102	43	4.36	+0.14	7
1909	74.5	+0.6	99	43	5.03	+0.81	14
1910	70.0	−3.9	99	36	3.24	−0.98	[illegible]
1911	75.2	+1.3	106	45	4.06	−0.16	[illegible]
1912	70.2	−3.7	95	38	3.55	−0.67	10
1913	75.0	+1.1	107	38	2.87	−1.35	7
1914	78.3	+4.4	108	45	2.30	−1.92	5
1915	71.7	−2.2	95	42	4.79	+0.57	12
1916	70.1	−3.8	99	45	4.94	+0.72	11
1917	70.9	−2.0	100	39	4.30	+0.08	10

Climatological data for June, 1917.

Stations.	Counties.			Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					
		Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	14	71.5	-2.1	96	12	39	16	36	3.10	-0.33	0.80	0	8	22	2	6	s.	W. T. Austin.
Blandville	Ballard	445	35	72.3	2.6	94	26	43	16	31	3.46	-1.37	1.81	0	7	11	15	4	sw.	E. W. Horr.
Calhoun	McLean	437	13	72.2	2.8	97	26	40	16	35	5.52	+1.89	2.27	0	11	10	18	2	sw.	W. A. Taylor.
Earlington	Hopkins	420	26	73.6	-2.0	100	26	40	16	34	3.68	+0.15	1.47	0	6	21	0	9	se.	Brick Southwoith.
Greenville	Muhlenburg	519	0	^{c}71.9	...	93^{c}	24†	42^{c}	19	44^{c}	4.81	...	1.48	0	9	10^{c}	16^{c}	1^{c}	s.	C. R. Lovell.
Hopkinsville	Christian	524	20	72.6	-2.6	94	25†	44	16	34	3.35	-0.93	1.41	0	9	14	3	13	w.	W. F. Randle.
Marion	Crittenden	571	18	73.8	1.1	96	26	42	15	31	5.48	+1.83	2.78	0	6	14	11	5	sw.	B. C. Paris.
Mayfield	Graves	364	7	71.4	-2.2	96	26	42	16	34	...	...	0.53	0	7	13	8	9	s.	J. N. Davis.
Owensboro	Daviess	479	20	71.4	2.9	95	26	46	16	29	2.59	-0.98	1.42	0	6	18	9	3	se.	Henry S. Berry.
Paducah	McCracken	341	17	72.6	-5.3	94	23^{1}	43	16	33	5.44	+0.53	1.40	0	10	24	0	6	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Dr. J. A. H. Miller.
Russellville	Logan	590	5	^{d}66.8	...	90^{d}	28	42	16	29	4.37	...	1.31	0	10	18	7	5	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	69.4	-3.7	90	26	42	16	27	5.45	+0.41	1.10	0	10	18	3	9	s.	W. W. Hicks.
Anchorage	Jefferson	700	16	70.8	1.2	96	26	40	16	41	3.65	0.00	1.28	0	8	21	7	2	sw.	C. E. Barret.
Bardstown	Nelson	637	20	72.0	-2.6	97	25†	42	16^{1}	40	3.74	-0.60	1.13	0	9	16	6	8	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	72.9	3.0	97	25	42	16	37	3.45	-0.42	1.05	0	8	10	15	5	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	...	...	...	...	...	...	...	...	6.62	...	1.48	0	11	...	...	...	...	James H. Young.
Burnside	Pulaski	773	24	...	...	...	...	...	...	...	3.83	-0.55	0.74	0	14	...	...	...	...	C. L. Hurt.
Carrollton	Carroll	...	...	...	...	...	...	...	...	...	5.50	+2.20	1.18	0	13	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	3	...	...	...	...	...	...	...	4.19	...	1.62	0	9	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	23	^{a}70.4	-2.7	93^{a}	26	42^{a}	16	34^{a}	4.48	+0.21	1.11	0	9	16^{a}	7^{a}	6^{a}	w.	P. W. Ray.
Eubank	Pulaski	1177	22	68.3	-2.8	94	26	40	16†	38	3.92	-0.16	0.85	0	12	11	7	12	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	70.9	2.4	95	26	42	16	35	3.98	-0.14	1.57	0	10	18	4	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	71.9	-3.0	93	26	43	16	31	5.01	+1.04	1.15	0	14	1	26	3	sw.	J. E. Newman.
Greensburg	Green	581	24	70.4	-3.1	95	26	40	17	39	3.42	-1.11	0.90	0	11	9	14	7	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	...	...	...	...	...	...	...	5.53	+1.54	1.85	0	12	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	19	71.6	2.1	92	25†	43	16	31	3.85	-0.14	0.87	0	8	19	5	6	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	70.2	1.4	93	26	39	17	39	4.80	+0.98	1.40	0	15	23	6	1	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	71.6	-1.3	95	26	42	16	36	2.91	-1.08	0.77	0	11	19	8	3	sw.	John E. Stone.
Lexington	Fayette	989	29	70.0	3.2	91	29	43	16	29	3.54	-0.45	1.32	0	10	15	8	7	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	71.6	-0.9	94	26	40	16†	39	4.80	+0.32	1.85	0	10	16	2	12	...	Loretto Academy.
LOUISVILLE	Jefferson	525	44	72.0	3.0	95	26	46	16	29	3.18	-1.05	1.19	0	9	11	10	9	sw.	U. S. Weather Bureau.
Do. Cherokee Park**	Do.	534	7	70.0	...	91	26	43	16	33	4.18	...	0.95	0	12	14	14	2	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	71.1	1.2	96	26	41	16	34	2.85	-1.15	0.80	0	9	21	2	7	...	Sisters of Loretto.
Scott	Kenton	900	19	69.0	-2.6	92	26	43	16†	31	3.79	+0.11	1.05	0	10	11	16	3	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	70.4	-3.5	95	26	40	16	35	3.56	-1.14	0.95	0	9	14	12	4	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	71.4	-0.9	95	25	41	16†	38	2.72	-1.81	0.98	0	10	16	12	2	s.	E. D. Bourne.
Williamstown	Grant	943	11	69.8	-0.8	93	26	43	16	33	4.94	+1.21	1.26	0	14	14	6	10	...	Miss Rose Carter.
Woodbury	Butler	390	...	...	...	...	...	...	...	...	4.97	...	1.35	0	9	...	...	...	...	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	70.2	1.6	93	13^{1}	42	16	40	4.43	-0.28	1.04	0	12	15	3	12	sw.	A. H. Bowman.
Berea	Madison	1070	15	70.2	-2.3	95	26	39	16	33	4.58	-0.30	1.16	0	8	21	7	2	sw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	...	...	...	...	...	...	...	3.98	-0.18	1.10	0	9	...	...	...	...	Forester Farley.
Falmouth	Pendleton	600	28	...	...	...	...	...	...	...	5.29	+1.07	0.96	0	13	16	8	6	s.	J. V. Oldham.
Farmers	Rowan	668	9	70.8	-0.6	95	28^{1}	40	17	42	5.49	+1.50	1.25	0	11	24	2	4	w.	Durwood Cassity.
Hazard	Perry	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	Breathitt	776	5	...	...	...	...	...	...	...	6.71	...	2.10	0	10	...	...	...	...	Jas. L. McCoy.
London	Laurel	1190	2	...	...	...	...	...	...	...	3.91	...	0.70	0	12	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	13	...	...	...	...	...	...	...	5.81	+0.77	1.60	0	12	...	...	...	...	F. C. Sammons
Manchester	Clay	1400	7	...	...	...	...	...	...	...	4.67	...	1.18	0	7	...	...	...	...	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	70.2	2.7	97	26	42	17	37	4.14	-0.19	1.23	0	11	13	12	5	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	69.3	2.9	93	26	42	17	35	3.65	-0.85	0.92	0	12	16	14	0	...	B. H. Perkins.
Mount Sterling	Montgomery	930	27	69.5	-2.9	95	26	41	16	35	6.53	+1.55	1.86	0	10	17	4	9	sw.	W. R. McKee.
Pikeville	Pike	634	11	...	...	...	...	...	...	...	3.48	-0.83	0.72	0	11	...	...	...	...	I. M. Williams.
Richmond	Madison	926	23	70.2	3.2	94	26	42	16	35	3.45	-0.49	1.05	0	12	15	11	4	sw.	J. W. Crooke.
Weeksbury	Floyd	1216	3	^{c}71.0	...	^{c}95	26	^{c}41	17	^{c}37	3.32	...	0.62	0	13	16	13	1	...	O. A. Lund.
Williamsburg	Whitley	939	19	70.7	2.8	95	26	41	17	39	3.84	-0.71	0.93	0	13	15	7	8	s.	N. C. Jones.
State averages and extremes		...	...	70.9	...	100	26	39	16	44	4.30	...	2.78	0	10	15	9	6	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post office address, Normal, Ky.; ‡‡Nerinx, Ky.

Daily Precipitation for June, 1917.

Stations		Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Western Division.																																
eaver Dam	G	.50	.62				.35		.80	.50				[illegible]								.10			.05				[illegible]			[illegible]
landville	M	.59	1.22						[illegible]	1.17											T.	.23							[illegible]	[illegible]		[illegible]
alhoun	G	1.15	.98			T	T	.36	.25	[illegible]	[illegible]				[illegible]					T		[illegible]			.11	T			[illegible]	[illegible]		[illegible]
arlington	G		1.43				T	.59		1.47	.21											.16				[illegible]				[illegible]		[illegible]
reenville	G	1.48	.81					.80		.95	.32				.10							.10					.10	.10				[illegible]
opkinsville	C		1.41					.20		.48	.19				.15						.08	[illegible]						[illegible]		[illegible]		[illegible]
arion	O	1.17	.93							2.78										.10		[illegible]			T					[illegible]		[illegible]
ayfield	M							.40		.53	.20				[illegible]							[illegible]						[illegible]		[illegible]		[illegible]
wensboro	O	T	1.42	.02			.05	T	T	.85	.13				.12						T	T					[illegible]					[illegible]
aducah	O	1.12	1.25				.02			1.40	.02			.30							[illegible]	.26							[illegible]	[illegible]		[illegible]
rinceton	G																															
ussellville	G		1.31	.03				.01	.26	.75	1.00											[illegible]			.15			.02		.34		[illegible]
Central Division.																																
lpha	C	.40	.75	T				.50	.35	1.10	.35									.45	T.	.50			[illegible]				.80			[illegible]
nchorage	O	1.07	.40			.11	.06	.16	T	1.28	.13									T									.41			[illegible]
ardstown	S		.80	.26		.10		1.08		1.13	.10				.69										.12					.06		3.74
owling Green	G	T	1.05					.07		.30	.65	.15										T	.23		.85					[illegible]		3.45
rownsville	G		1.07	.06				1.18	.04	.62	.99	.04			.05							.04			1.48					1.15		[illegible]
urnside‖	C		.74	.12	.04			.15	.05	.55	.46	.14			.29		T				.35	.33	.16		T.	.07				[illegible]		[illegible]
arrollton	O	1.18				.53	.06	.48	.94	.66		.02			.35	.09	.02	.35											.03	[illegible]		[illegible]
ewisport	O		1.62	.01		.09	T	.77	.12	1.11	.17				.07							T			T			T.		.23		[illegible]
dmonton	G	.61		.84				.02	.32	1.11	.60														.33	[illegible]				[illegible]		4.18
ubank ‡	C		.85				.07	.45		.47		.39			.03						.72	.08	.04		.05	.05				.72		3.92
rankfort	K		.68	.02		.32		.22		1.57	.12				.50	.02													.17	.06		[illegible]
ranklin	G	.60	.29	.06			.15	.31	.54	.78	.14				.22						.06	1.15			.30		T.	T	.11	.27		5.01
reensburg	G		.76					.29	.20	.90	.20	.07			.12						.01	.04			.24					.59		3.42
igh Bridge	K		.98	.33			.17	1.85		.89	.50	.07			.25	.03	.01												.15	.30		5.53
rvington	O	.87	.40			.09		.56	.76	.82	T				T.										[illegible]				[illegible]			3.85
unction City	K	.48	.65		.02	.11		.75	.05	1.40	.18	.02	T.		.31	.32					.02	.06			.10					[illegible]		4.80
eitchfield	G	.42	.47			.13	.17		.05	.77	T.			*	.43							.02			.33				.12			2.91
exington ***	K	.22	.19			.22	.48		T.	1.32	T.			.13	.29	.12				T.		T.			.01			T	.56			[illegible]
oretto	S	.55	.25			.25	.15	.25	T.	1.85	.20				.40	T					T	T.			.45					.55		4.80
ouisville***	O	.81	.38			.13	.48		T.	.89	.07			.17		.03				T					T			T	.22			3.18
Do. (Cherokee Park)	O	.45	.72			.18	.12	.49	T.	.95	.17				.16	.09					.03	T.			.04			T	.78			4.18
t. John	S		.80	.10		T.		.80		.50	.20				.10						T.	.05			.10			T	T.	.20		2.85
cott	L	.42	.38			1.03	.03		.21	1.05	T				.03	T.												.49	.01	.14		3.79
helbyville	S		.95			.20		.25		.95	.18				.26	.04													.27	.46		3.56
aylorsville	S	.36	.33			.09	T.	.07		.98	.04				.19	.01				T.	T	T						.44		.21		2.72
illiamstown	L	.04	1.26	.03		.47	.17	.04	.14	.90	.98	.04			.46	.03													.18	.20		4.94
oodbury	G		1.35	.05				.20		.46	1.22				.08							.09			.73					.79		4.79
Eastern Division.																																
eattyville	K	.26	.87	.10				.73		.40	.20				.34		.10				1.04		.03						.20	.22		4.43
erea	K	1.16	.31			.21		.75		.74					.42	.21														.78		[illegible]
atlettsburg‖	B	.60	.53	.02			.18	.50			.30				.17						.58									1.10		3.98
almouth	L		.96	.12		.47	.12		.50	.71	.20	.28			.61	.04					.27								.16	.85		5.29
armers	L	.80	.60				.25	.84		.75	.10				.47	.10					1.25								.10	.23		[illegible]
azard	K																															
ackson	K	.20	1.55	2.10				T.	1.03		.28	.33				.68	T.	.12				T								.20	.22	6.71
ondon	C	.30	.03				.10			.30	.70	.06			.30						.70	.30				.17			.70	.25		3.91
ouisa	B	.92	1.60	.27			.10	.32		.26		.23			.10						.49		.02						.38	1.12		5.81
anchester‖	K		.80	.27			.43			.60											1.07	.32								1.18		4.67
aysville	O	1.23	.42	.02		T.	.36	.16		.69	.37	T			.29	.08	T.				.09		T						T	.45		4.14
iddlesboro	C	.37	.08			.30		.28	.53	.22	.21				.05						.09	.12						.92		.48		3.65
ount Sterling	L	T.	1.86				.18	1.36	.57		.34				.48	.14	.02				.28		T.							1.30		6.53
ikevile	B		.72	.24	.36			.12		.10	.30	.20			.42						.70				.26				.06			3.48
ichmond	K	T.	.80	T.			.25	1.05		.46	.15				.15	.05	.02				.12	T.	.02		T				.20	.18		3.45
eeksbury	B	.62	.09	.29		.09		.25	.08	.23	.32				.19	.17	.04												.35	.60		3.32
illiamsburg	C	T.	.92	.16	.04		.03	.47		.34	.10	.03			.02	T.	T.				.64	.11	.05							.93		3.84

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

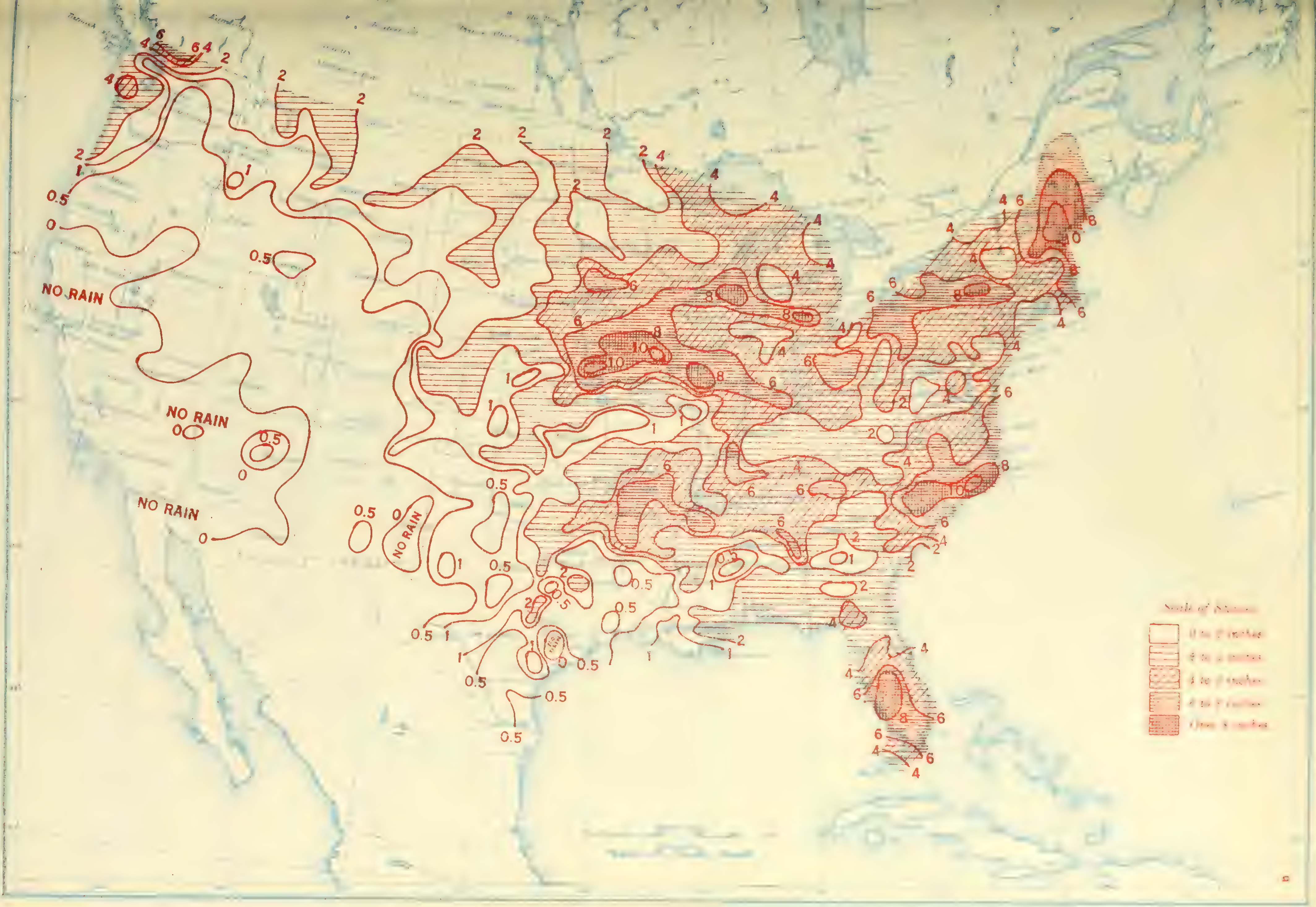
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for June, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	78	77	75	81	84	80	82	81	74	77	81	96	89	77	57	72	79	88	88	84	83	91	89	90	92	92	93	89	83	89	..	83.
	Minimum	63	59	56	54	60	68	61	63	64	60	63	62	65	55	49	39	43	52	60	61	63	59	64	68	68	65	67	72	68	56	..	60.
Blandville	Maximum	77	76	73	81	82	81	83	76	73	80	83	86	89	78	67	69	77	84	82	83	84	88	89	93	92	94	91	90	86	86	..	82.4
	Minimum	60	65	57	60	71	69	58	63	63	58	62	66	63	55	49	43	49	53	59	63	63	64	68	71	70	73	72	68	67	64	..	62.2
Calhoun	Maximum	83	79	76	81	83	81	83	80	77	79	84	86	90	86	69	72	79	86	84	87	87	88	91	95	92	97	94	90	86	90	..	84.5
	Minimum	58	61	54	54	69	69	60	63	60	59	57	60	65	69	46	40	44	52	57	58	62	59	66	70	65	64	67	67	65	57	..	59.9
Earlington §§	Maximum	81	80	79	86	85	83	86	84	75	79	89	93	92	81	61	77	83	92	88	90	86	93	93	98	98	100	97	95	89	94	..	86.9
	Minimum	62	61	55	53	65	71	58	67	62	60	56	61	64	53	50	40	44	56	62	58	63	59	67	65	69	66	67	69	66	57	..	60.2
Greenville	Maximum	80	77	79	81	82	80	82	84	74	77	84	87	..	88	65	72	..	..	86	85	84	87	89	93	92	92	93	88	85	89	..	c82.
	Minimum	60	62	56	54	70	71	59	65	62	59	57	59	..	55	49	43	..	..	42	59	63	59	64	71	69	64	68	68	65	56	..	c60.
Hopkinsville §§	Maximum	81	80	76	82	83	80	84	80	75	79	85	87	90	80	60	71	79	87	87	85	82	88	91	92	94	94	93	92	87	89	.	83.
	Minimum	68	61	59	58	61	71	60	62	64	59	58	62	67	56	51	44	47	53	58	62	63	61	64	70	72	65	68	69	66	59	..	61.3
Marion	Maximum	79	77	76	80	80	80	84	79	74	79	83	85	79	77	63	71	79	85	83	85	84	87	89	94	94	96	92	91	85	88	..	82.
	Minimum	60	61	69	61	74	73	59	65	60	63	66	66	78	47	42	43	48	61	68	72	64	79	73	72	77	77	73	71	65	64	..	65.
Mayfield §§	Maximum	80	78	74	82	82	82	83	79	74	82	75	88	90	80	78	70	79	85	82	85	83	88	89	92	94	96	92	90	85	87	..	83.
	Minimum	67	61	58	59	61	70	57	59	63	57	58	60	64	53	47	42	45	48	56	60	51	60	61	67	68	68	69	67	65	60	..	59.4
Owensboro §§	Maximum	77	77	72	80	83	80	81	79	73	76	80	85	88	75	58	70	74	83	83	83	83	87	90	92	90	95	93	90	83	87	..	81
	Minimum	64	61	56	56	64	68	60	64	64	61	60	62	67	54	48	46	50	54	60	56	65	61	67	71	67	66	69	68	66	60	..	61.2
Paducah (Lone Oak)	Maximum	90	75	81	81	83	85	86	77	78	80	78	83	87	68	69	66	75	88	92	78	84	84	94	94	90	85	91	94	82	86	..	82
	Minimum	57	62	57	59	71	72	59	63	62	60	61	66	65	55	50	43	50	56	62	63	63	64	68	71	71	72	72	68	66	64	..	62.
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Russellville §§	Maximum	80	75	76	83	80	78	81	78	69	69	78	85	83	76	59	56	58	67	65	64	64	67	87	88	..	83	..	90	..	..	..	d74.
	Minimum	65	60	53	54	54	68	61	61	63	59	56	59	63	55	50	42	43	52	56	61	62	59	60	66	68	67	67	66	65	58	..	59.
Central Division.																																	
Alpha	Maximum	73	77	68	75	84	76	76	70	66	65	73	81	85	71	59	65	72	79	80	79	67	79	85	81	85	90	87	85	77	80	..	76.
	Minimum	71	64	63	50	72	74	65	65	65	60	60	56	62	59	53	42	45	53	70	67	64	60	62	70	66	63	76	70	67	59	..	62.
Anchorage	Maximum	76	79	74	80	88	80	82	83	75	79	86	88	89	77	62	72	83	90	86	84	85	93	89	91	93	96	92	92	83	87	..	83
	Minimum	64	61	53	49	54	66	60	62	60	59	55	58	62	52	47	40	42	50	56	54	59	56	63	66	63	65	66	66	65	57	..	57
Bardstown §§	Maximum	75	81	77	83	87	83	82	80	79	81	85	91	89	79	62	74	82	88	89	89	85	92	93	94	97	97	95	92	88	92	..	85
	Minimum	59	62	55	50	62	66	60	62	63	59	58	58	62	54	48	42	42	50	59	62	61	56	64	67	62	63	66	67	66	56	..	58.
Bowling Green §§	Maximum	80	80	73	84	89	79	89	85	76	75	85	90	96	80	60	77	82	89	89	89	85	93	90	94	97	95	96	94	89	94	..	85.
	Minimum	63	60	55	54	58	67	62	62	62	59	59	60	63	56	50	42	45	54	62	65	64	60	63	64	64	68	68	66	66	59	..	60.
Edmonton	Maximum	77	75	80	81	84	83	81	78	75	65	80	86	89	86	74	69	79	85	86	87	79	86	89	88	91	93	92	89	84	..	..	a82
	Minimum	61	61	65	49	64	66	62	56	62	55	55	56	61	56	50	42	60	50	54	56	53	52	62	64	62	63	67	67	65	..	..	a58
Eubank §§	Maximum	78	79	72	79	82	82	79	75	73	72	79	85	87	74	56	65	78	80	84	84	73	84	82	87	89	94	91	88	83	86	..	80.
	Minimum	61	60	58	47	52	66	62	57	60	59	54	52	62	55	48	40	40	49	53	61	60	55	60	61	64	58	63	64	64	64	..	56.
Frankfort	Maximum	82	83	76	80	81	82	82	80	79	78	79	85	90	86	71	66	75	84	88	84	81	88	92	88	88	95	93	91	81	87	..	83
	Minimum	59	61	55	49	62	65	61	62	62	60	58	56	61	55	48	42	43	49	57	60	60	56	63	70	60	64	68	67	67	58	..	58
Franklin	Maximum	78	80	73	82	85	80	82	78	76	74	81	86	90	80	65	68	78	86	88	84	78	85	90	88	91	93	92	90	83	86	..	82
	Minimum	60	61	59	56	68	68	61	62	62	59	59	61	66	55	51	43	47	56	66	64	62	62	69	67	69	69	70	67	65	61	..	61.
Greensburg §§	Maximum	78	81	72	81	84	83	82	77	75	73	80	85	96	76	59	68	79	85	87	86	78	87	92	88	93	95	93	90	85	86	..	82.
	Minimum	63	61	57	49	63	65	61	56	61	59	55	56	60	56	51	41	40	49	59	62	61	59	60	66	65	62	65	64	66	57	..	58.
Irvington	Maximum	72	79	72	80	84	80	81	79	76	75	79	86	88	81	65	68	71	84	85	83	83	88	88	89	92	92	91	90	82	87	..	81.
	Minimum	62	63	56	53	67	71	63	61	64	61	59	62	66	56	49	43	47	53	63	60	65	61	69	68	66	71	72	70	67	60	..	61.
Junction City	Maximum	82	81	80	80	82	80	83	78	82	77	81	86	88	88	72	75	78	83	86	85	77	87	90	89	91	93	91	89	84	87	..	83
	Minimum	60	60	55	46	64	58	61	61	59	56	57	52	58	54	48	41	39	48	59	62	57	54	60	67	59	58	65	66	65	54	..	56
Leitchfield	Maximum	77	80	75	81	84	79	83	80	76	76	82	87	90	85	63	71	80	87	86	87	83	89	90	91	93	95	93	90	84	88	..	83
	Minimum	60	61	56	52	66	66	60	61	64	59	58	60	64	55	47	42	44	52	62	62	62	58	65	65	66	68	66	66	66	57	..	59
Lexington	Maximum	75	79	69	77	81	79	78	74	72	75	77	85	86	72	55	64	76	83	84	81	76	85	89	87	88	91	89	88	79	85	..	79
	Minimum	60	60	55	55	63	61	63	61	59	59	57	61	57	54	45	43	51	62	64	62	65	64	68	67	63	72	72	65	66	67	..	60
Loretto	Maximum	86	81	75	79	84	86	82	82	80	79	82	87	91	87	75	72	79	87	84	86	86	86	90	91	92	94	91	89	89	90	..	84
	Minimum	60	60	55	48	64	69	61	61	60	58	57	55	62	54	47	40	40	50	64	61	60	55	64	65	62	62	63	68	65	66	..	58
Louisville	Maximum	75	79	73	80	82	79	82	79	75	78	81	85	88	76	57	69	76	84	85	84	83	89	89	87	91	95	90	90	83	88	..	81.
	Minimum	61	62	56	56	65	66	63	67	62	60	61	62	59	52	47	46	51	56	66	64	66	64	72	69	65	75	73	66	68	65	..	62
Do. (Cherokee Park)	Maximum	78	79	76	79	80	80	81	79	77	77	79	84	87	83	68	67	75	83	84	81	79	87	86	86	88	91	87	89	80	83	..	81.
	Minimum	59	61	54	50	63	66	60	64	63	60	57	58	62	54	46	43	44	50	59	58	61	59	65	66	59	66	67	69	65	59	..	58
St. John §§	Maximum	75	79	72	79	84	79	81	79	76	78	80	84	88	78	61	67	76	85	88	85	82	88	90	94	94	96	93	92	86	89	..	82
	Minimum	59	61	54	51	60	67	60	60	63	69	68	58	63	53	49	41	42	51	59	61	62	66	62	67	65	64	66	66	65	56	..	59
Scott	Maximum	73	78	73	76	74	80	80	74	75	75	76	82	85	79	58	65	74	82	83	84	78	86	86	87	86	92	86	87	81	84	..	79
	Minimum	59	62	54	49	61	66	66	60	62	58	56	55	61	52	49	43	43	53	62	59	59	59	68	67	57	65	65	67	65	60	..	58
Shelbyville §§	Maximum	74	78	73	80	82	80	80	78	77	79	82	86	88	76	59	69	78	86	87	86	82	89	90	92	93	95	61	89	84	89	..	82
	Minimum	58	60	49	50	59	65	60	61	62	59	56	60	64	53	47	40	44	51	60	60	61	55	64	68	61	65	67	67	65	58	..	58
Taylorsville	Maximum	78	80	74	80	85	81	84	81	78	78	78	85	88	80	64	68	79	85	87	84	77	89	91	90	91	95	92	90	81	88	.	82
	Minimum	59	62	57	49	66	69	62	62	64	61	64	57	67	56	49	41	41	49	57	61	60	55	63	69	59	58	65	69	67	57	..	59.
Williamstown §§	Maximum	76	78	74	78	78	81	80	76	76	78	80	90	86	74	58	68	75	84	87	85	78	87	89	77	89	93	90	88	82	87	..	80
	Minimum	61	60	53	52	55	63	61	62	61	59	55	58	62	52	48	43	47	58	60	61	62	61	63	69	59	60	70	69	65	62	.	59
Eastern Division.																																	
Beattyville §§	Maximum	85	85	76	85	85	87	85	79	78	80	86	90	93	80	63	70	81	87	83	82	79	90	93	90	93	92	75	92	86	90	..	84
	Minimum	61	59	60	49	43	60	60	57	58	60	58	55	59	55	54	42	42	47	53	57	55	58	60	65	61	60	62	63	65	56	..	56
Berea	Maximum	79	82	83	80	79	80	80	79	74	78	78	86	88	76	66	68	77	84	87	83	76	86	90	86	89	95	92	85	83	86	..	81
	Minimum	61	61	58	50	54	56	60	61	60	62	62	59	60	53	48	39	51	54	63	62	59	59	61	64	60	62	62	72	75	52	..	58
Farmers	Maximum	87	85	86	85	83	86	87	87	83	82	80	87	90	85	78	70	78	86	91	87	87	88	94	90	90	92	91	95	95	82	..	86.
	Minimum	57	60	56	44	58	63	60	52	56	56	60	57	57	55	48	43	40	44	52	58	53	55	60	68	56	57	62	61	63	55	..	55.
Maysville §§	Maximum	82	84	72	84	82	85	82	78	75	80	76	87	93	78	61	78	78	78	90	87	81	89	96	89	89	97	93	93	83	89	..	83
	Minimum	58	60	54	48	50	63	62	62	59	56	55	54	57	54	49	43	42	46	54	59	55	56	59	68	55	62	65	64	65	67	..	56
Middlesboro	Maximum	82	80	71	79	85	83	82	77	74	71	78	85	88	83	72	67	77	82	82	82	79	83	88	87	90	93	92	87	82	83	..	81
	Minimum	60	59	59	51	55	61	62	52	60	58	58	57	59	58	45	43	42	48	55	59	59	60	60	63	62	60	60	61	66	57	..	57
Mount Sterling §§	Maximum	80	83	70	80	81	83	80	75	76	76	78	83	89	76	57	65	75	83	87	82	76	86	91	87	87	95	94	91	80	86	..	81
	Minimum	59	60	55	48	62	63	60	60	60	56	58	53	62	56	48	41	42	50	58	62	58	57	63	69	60	60	68	67	65	59	..	58
Richmond §§	Maximum	78	80	72	82	78	81	80	75	72	73	77	85	87	75	56	67	75	85	85	82	75	85	87	89	87	94	92	87	80	83	..	80
	Minimum	65	62	57	52	66	65	61	63	62	58	57	57	65	56	49	42	46	55	65	63	63	60	66	69	61	65	70	67	66	60	..	60
Weeksbury	Maximum	..	..	..	..	..	86	83	78	88	74	80	87	92	87	69	64	78	84	85	82	78	86	91	87	87	95	94	92	88	84	..	e84
	Minimum	..	..	..	..	..	57	63	54	58	57	60	57	61	66	51	48	41	48	55	57	57	59	59	65	62	59	63	62	74	56	..	e58
Williamsburg §§	Maximum	83	85	78	83	84	87	81	76	82	72	81	88	92	78	58	73	80	85	86	84	77	86	92	87	91	95	93	93	83	85	..	83
	Minimum	63	67	61	56	53	64	64	55	60	59	58	55	59	57	55	42	41	49	56	60	63	60	64	59	60	61	63	61	66	53	..	58

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

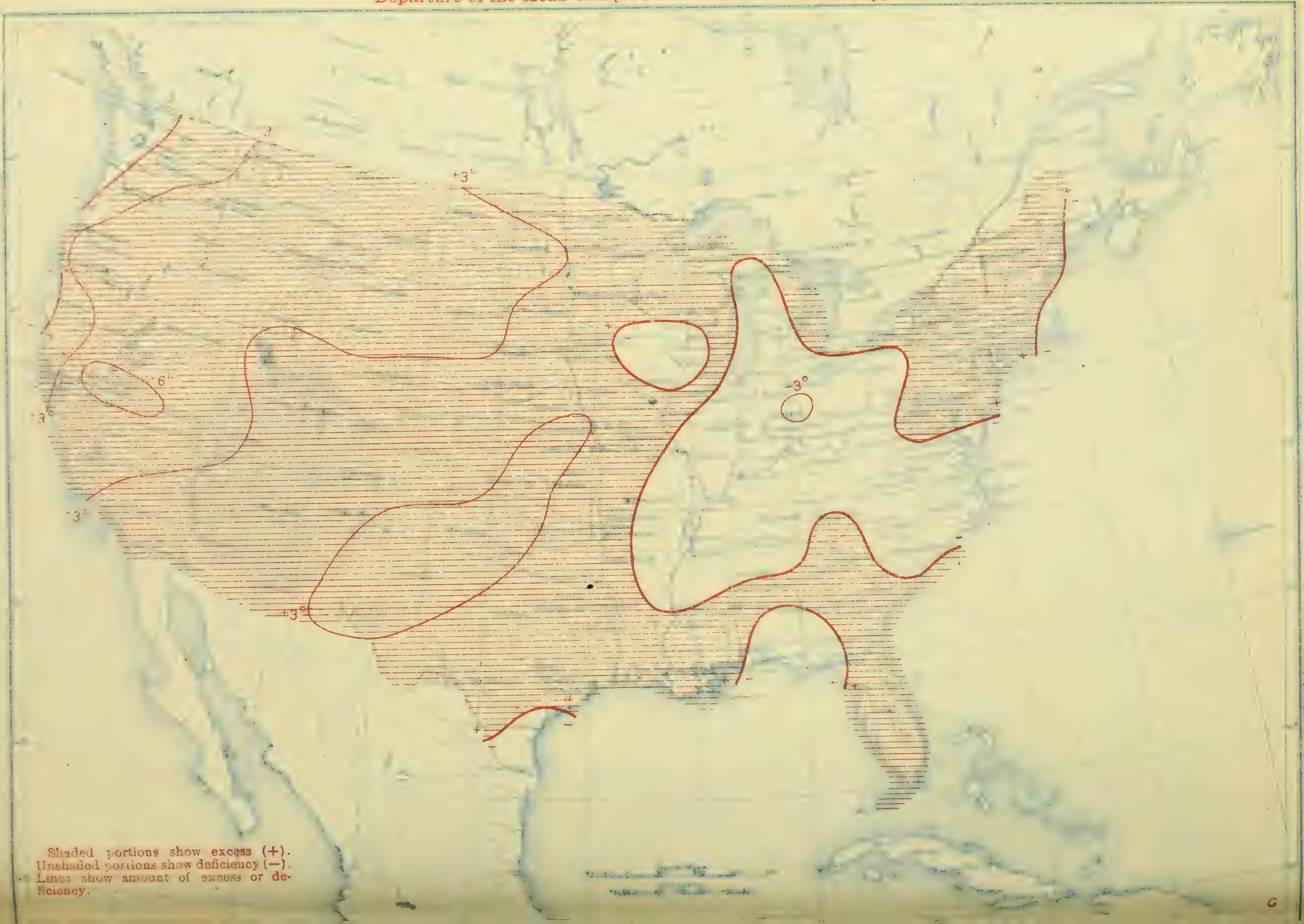
KENTUCKY SECTION

JULY, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 23, 1917

Departure of the Mean Temperature from the Normal, July, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

OL. XXII. LOUISVILLE, KY., JULY, 1917. No. 7.

GENERAL SUMMARY.

During the first three weeks there were only a few days of
eal July weather with temperatures favorable for the develop-
ıent of corn. The nights during this period were abnormally
ool, minimum temperatures being frequently below 60°, and
ı a few instances as low as 50°. A change to higher and more
easonable temperature occurred about the 24th, and decidedly
igh temperature continued until the end of the month. On
ccount of the backwardness of the season, due to the low temp-
ratures of May, June and July, the growth of all crops had
een delayed. Corn especially had suffered and the hot weather
f the last week, therefore, came at a time when it was abso-
itely necessary for the proper development of that most im-
ortant crop.

Rain occurring only in scattered showers, together with the
ool weather prevailing, afforded excellent conditions for com-
letion of the wheat harvest during the first two weeks. Gen-
al showers set in about the 15th and continued almost daily
ntil the 27th, furnishing plenty of moisture in most localities
though interfering to some extent with oats and hay harvest.,
he month closed with the crops in excellent condition and
owing rapidly.

PRESSURE.

Low pressure areas, mostly in the form of shallow troughs,
assed over or near this section during the 1st-2d, 6-7th, 9th,
1-12th, 14-15th, 16-17th, and 23d. High pressure formations
rgely dominated during the 3d-5th, and from the 18th to 31st
clusive. Only a few light scattered showers attended the low
eas of the first twelve days; but generous rains occurred with
e low areas of the 14-15th and 16-17th, and showers were
equent over the State during the dominance of high pressure
om the 18th to 28th inclusive.

The mean sea-level pressure, based on the reports of two
ations, was 30.00 inches. The extremes were 30.20 inches on
e 26th at Louisville and Lexington, and 29.63 inches on the
2th at Lexington.

TEMPERATURE.

The average temperature for the State, as determined from
e reports of 40 stations, was 75.3°, which is 1.5° below nor-
al. Maximum temperatures of 90° or higher were registered
enerally over the State only on the 1st, 7th, 8th, and 28th-31st.
he extremes were 100° at Loretto on the 31st; and 50° at
eaver Dam on the 4th, and at Greensburg and Junction City
ı the 13th.

PRECIPITATION.

The average precipitation, based on the reports from 53 sta-
ons, was 4.38 inches, which is nearly normal for July. It was
regularly distributed over the State, total amounts for the
onth differing as much as 2 to 5 inches at contiguous stations.
ı general amounts ranged from 6 to more than 8 inches over
e southern border counties east of the lower Cumberland, and
om 3 to 5 inches in most other sections. Amounts at the
arious stations ranged between 1.86 inches at Louisville and
16 inches at Frankfort. Most of the rainfall came in the form
f local thundershowers, and during the period 15-28th these
ere more or less general over the State every day.

WIND.

The total wind movement at Louisville was 6,847 miles, and at Lexington 7,631 miles, with average hourly velocities of 9.2 and 10.3 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 34 miles per hour from the south, and at Lexington 30 miles from the southwest, on the 13th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 77 per cent, at 2 p. m. 51 per cent, and at 7 p. m. 61 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 61 and at Lexington 48.

MISCELLANEOUS.

July 2.—Three persons were shocked and their residence set on fire by lightning at Louisville. Also, lightning destroyed a barn at Hickman, a residence near New Castle, and a barn near Williamstown. A church at Henryville and a residence at Lagrange were struck by lightning and damaged.

July 14.—Extensive damage was caused by a windstorm in Hickman County. One person was killed, four persons were injured, several buildings damaged, and several head of stock killed.

July 16.—Two head of cattle were killed by lightning near Frankfort.

July 21.—Hail in Bourbon County damaged tobacco.

July 27.—Three tanks of oil were destroyed by lightning near Campton, Wolfe County, with a loss of $1,500.

July 23.—Three persons were prostrated by heat at Louisville.

Rivers:.—Good stages prevailed in the Ohio River during the month.

ERRATA.—June, 1917. —Taylorsville, monthly mean temperature should be 71 0.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	75.1	−1.7	98	50	5.62	+1.27	..
1890	73.0	−3.8	101	44	2.66	−1.69	..
1891	74.0	−2.8	91	47	4.08	−0.27	..
1892	76.5	−0.3	100	48	3.30	−1.05	..
1893	78.8	+2.0	101	50	3.48	−0.87	..
1894	76.2	−0.6	105	43	2.03	−2.32	..
1895	75.2	−1.6	99	49	5.75	+1.40	9
1896	77.4	+0.6	103	47	7.44	+3.09	11
1897	77.8	+1.0	107	50	4.79	+0.44	10
1898	77.8	+1.0	102	48	4.71	+0.36	11
1899	77.3	+0.5	100	47	3.78	−0.57	9
1900	77.9	+1.1	101	50	4.91	+0.56	11
1901	81.7	+4.9	112	48	1.72	−2.63	5
1902	78.1	+1.3	107	48	1.91	−2.44	6
1903	77.5	+0.7	104	49	3.53	−0.82	8
1904	75.2	−1.6	99	46	3.40	−0.95	10
1905	75.9	−0.9	102	52	5.93	+1.58	13
1906	75.2	−1.6	100	51	6.02	+1.67	11
1907	78.1	+1.3	102	40	4.71	+0.36	9
1908	76.9	+0.1	100	50	3.94	−0.41	10
1909	74.8	−2.0	99	48	6.01	+1.66	11
1910	76.2	−0.6	96	51	8.63	+4.28	16
1911	75.8	−1.0	105	42	2.28	−2.07	7
1912	76.8	0.0	100	53	5.50	+1.15	12
1913	79.9	+3.1	109	48	2.54	−1.81	7
1914	78.8	+2.0	109	43	3.20	−1.15	6
1915	75.7	−1.1	102	49	5.30	+0.95	11
1916	78.6	+1.8	102	52	4.17	−0.18	9
1917	75.3	−1.5	100	50	4.38	+0.03	11

Climatological data for July, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	14	75.0	− 2.6	94	31	50	4	32	4.93	+0.54	1.60	0	14	15	4	12	sw.	Mrs. Della M. Davis.
Blandville	Ballard	445	35	76.4	− 1.5	93	1	58	4	25	5.96	+2.07	3.13	0	11	9	17	5	sw.	E. W. Horr.
Calhoun	McLean	437	13	76.4	− 1.4	97	31	56	4	32	2.17	−2.42	0.83	0	7	8a	20a	2a	sw.	W. A. Taylor.
Earlington	Hopkins	420	26	77.8	− 0.1	99	31	56	3†	34	3.51	−0.79	1.21	0	8	20	2	9	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	76.0	......	93	31	57	3†	33	3.51	......	0.95	0	8	14	17	0	w.	C. R. Lovell.
Hopkinsville	Christian	524	20	76.6	− 2.2	95	31	59	3	30	5.96	+1.93	3.50	0	9	12	1	18	w.	W. F. Randle.
Marion	Crittenden	571	18	^{b}76.2	− 1.6	94	1	58^{e}	5	28^{e}	4.86	+0.93	1.93	0	5	10	13	8	sw.	B. C. Paris.
Mayfield	Graves	364	7	76.2	− 1.4	95	14	58	3†	33	3.74	−0.91	1.40	0	10	5	17	9	sw.	J. N. Davis.
Owensboro	Daviess	479	20	76.2	− 1.8	93	1†	60	11†	29	2.47	−1.38	1.57	0	8	14	13	4	s.	Henry S. Berry.
Paducah	McCracken	341	17	77.3	− 4.0	98	29†	59	16	27	5.04	+1.10	1.67	0	9	20	0	11	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	......						......									......	Dr. J. A. H. Miller.
Russellville	Logan	590	5	^{b}76.1	......	93	7†	56	11	33^{d}	7.68	......	3.85	0	9	18	9	4	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	74.6	− 1.6	90	14	54	13	28	8.15	+2.45	0.54	0	10	8	12	11	s.	W. W. Hicks.
Anchorage	Jefferson	700	16	74.4	− 1.7	94	1†	52	4‡	34	3.50	1.00	0.76	0	12	16	12	3	sw.	C. E. Barret.
Bardstown	Nelson	637	20	76.6	− 1.9	97	31	53	3	36	2.68	−1.80	0.63	0	12	15	4	12	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	^{a}77.5	− 1.5	97a	1†	56a	13	36a	4.51	+0.05	2.50	0	8	13	16	2	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	......							......	4.96	......	1.39	0	14	......			......	James H. Young.
Burnside	Pulaski	773	24	......						......	5.99	+1.06	1.89	0	12	......			......	C. L. Hurt.
Carrollton	Carroll	......		......						......	2.55	−0.88	0.90	0	10	......			......	Charlie Oliver.
Cloverport	Breckenridge	375	3	......						......	2.37	......	0.57	0	11	......			......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	......															......	P. W. Ray.
Eubank	Pulaski	1177	22	73.4	− 1.3	92	31	51	13	35	4.12	−0.51	1.10	0	11	11	9	11	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	75.0	− 1.4	95	31	55	11	32	8.16	+4.19	2.20	0	12	11	10	10	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	76.6	− 0.9	92	31	61	3†	28	7.67	+3.56	3.96	0	9	2	25	4	sw.	J. E. Newman.
Greensburg	Green	581	24	74.9	− 1.5	95	31	50	13	33	2.87	−1.82	0.51	0	13	4	12	15	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	......						......	5.15	+0.63	1.68	0	13	......			......	Miss Lulu Wood.
Irvington	Breckenridge	646	19	76.0	− 1.4	94	31	59	4	28	2.54	−1.01	0.89	0	10	18	4	9	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	74.6	− 0.4	96	31	50	13	36	4.20	−0.03	1.24	0	15	13	13	5	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	75.9	− 0.7	94	31	56	3	32	2.97	−1.17	1.13	0	11	15	13	3	sw.	John E. Stone.
Lexington	Fayette	989	29	74.4	− 2.2	92	31	58	11	22	2.80	−1.64	1.07	0	14	11	14	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	75.9	− 0.4	100	31	53	3	35	4.00	−0.20	1.50	0	14	10	9	12	......	Loretto Academy.
LOUISVILLE	Jefferson	525	44	76.4	− 2.2	94	31	60	4	24	1.86	−1.88	0.78	0	13	9	12	10	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	7	73.9	......	92	31	55	4	29	2.38	......	0.50	0	12	7	17	7	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	75.0	− 0.7	94	31	54	13	35	5.93	+2.38	1.20	0	15	17	4	10	......	Sisters of Loretto.
Scott	Kenton	900	19	73.4	− 3.2	94	31	53	11	28	3.07	−0.27	0.49	0	13	10	12	9	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	74.9	− 2.2	95	31	52	11	34	4.57	+0.37	1.15	0	12	13	8	10	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	74.5	− 1.8	94	31	52	13	37	4.66	+0.02	1.66	0	11	11	5	15	s.	E. D. Bourne.
Williamstown	Grant	943	14	74.8	− 0.8	94	31	54	11	29	2.56	−1.50	0.87	0	8	16	5	10	......	Miss Rose Carter.
Woodbury	Butler	390	......							......	5.57	......	1.10	0	14	......			......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	73.2	− 2.3	95	1	54	12†	36	3.79	−1.24	0.77	0	12	5	12	14	s.	A. H. Bowman.
Berea	Madison	1070	15	74.4	− 2.0	94	31	54	13	27	3.08	−1.83	0.96	0	12	19	7	5	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	......						......	4.16	−0.52	1.28	0	10	..	..	...	......	Forester Farley.
Falmouth	Pendleton	600	28	......						......	3.17	−0.74	0.92	0	9	11	11	9	......	J. V. Oldham.
Farmers	Rowan	668	9	73.4	− 1.5	96	1	51	13	35	3.19	−2.11	1.00	0	7	19	2	10	w.	Durwood Cassity.
Hazard	Perry	......	1	......															......	......
Jackson	Breathitt	776	5	......						......	6.43	......	1.80	0	9	......			......	Jas. L. McCoy.
London	Laurel	1190	2	......						......	5.97	......	0.98	0	11	......			......	C. R. Lee.
Louisa	Lawrence	584	13	......						......	2.51	−0.90	0.52	0	9	......			......	F. C. Sammons
Manchester	Clay	1400	7	......						......	5.47	......	1.43	0	10	......			......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	75.0	− 2.0	97	31	54	3†	36	5.97	+1.43	3.15	0	11	10	10	11	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	73.8	− 0.9	90	8†	54	11	30	6.32	+0.82	1.67	0	11	13	16	2	w.	B. H. Perkins.
Mount Sterling	Montgomery	930	27	74.2	− 1.4	94	31	54	11†	30	3.80	−1.21	1.04	0	11	17	5	9	sw.	W. R. McKee.
Pikeville	Pike	634	11	......						......	3.64	−0.11	1.20	0	8	......			......	I. M. Williams.
Richmond	Madison	926	23	74.4	− 2.5	94	31	57	11	29	4.55	+0.68	1.20	0	11	19	5	7	s.	J. W. Crooke.
Weeksbury	Floyd	1216	3	74.6	......	94	29	55	11	35	5.02	......	1.83	0	10	11	11	6	......	O. A. Lund.
Williamsburg	Whitley	939	19	75.2	− 1.6	95	31	53	11	39	5.48	−0.39	1.62	0	16	4	8	19	s.	N. C. Jones.
State averages and extremes		......	......	75.3	......	100	31	50	4‡	39	4.38	......	3.96	0	11	12	10	9	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.

Daily Precipitation for July, 1917.

Stations.		Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
eaver Dam ‖	G	18		30									11			43	17		12	.70	06	T.	22	02		.23	.46	1.60	.36				[illegible]
landville	M		87				32			08				29	2.84	06	68		20					24			20	.18					[illegible]
alhoun	G		36							T	T	T	11	T	01	83		T.	02	T	T		T	T	.52		29			T.			2.17
arlington ‖	G		61	37									03			1.21					50	02						70	.07				3.51
reenville	G		55												.62	.95		.12				72				.01		.45		09			3.51
opkinsville	C			22									T			3.50	10	T.	.20		T	.10	60	T				.20	85		.19		[illegible]
arion	O		1.93									T		T	.57	1.09	T	27	T	T.					T.	T			1.00				[illegible]
ayfield ‖	M			.20				12							.06	1.40	.21	35					93	30				.15		.02			[illegible]
wensboro ‖	O		.11							T	T.		T			25	.21	10					07				10	1.57	.03				2.47
aducah	O		.89				.05			T					1.33	1.67	.50	01			.06			.13				.40					[illegible]
rinceton	G																																
ussellville ‖	G															3.85	.04	.12	2.16	.41	.10		.56				.03	41					7.18
Central Division.																																	
lpha	C														3.20	.10	.65		.20	T	1.05	1.05	.75	.20	T	T	20	.75					8.15
nchorage	O		.76									.01	.12	T	T.	60	26	03		.31		.21	.11	51	T	.09	49						3.50
ardstown	S		.09								03		.16			.21	.60	.12	.14				25		.20	.23	02	63					2.68
owling Green ‖	G			11												2.50			.22			.05	.90			.30	05	58					4.51
rownsville ‖	G			06												54	.03	.14	.21	.03	70	07	.56	.05		.02		63	1.39		.53		4.96
urnside ‖	C							10								1.89	.21	.57	T	T.	27	04	1.45	.15		.56	.04	.03	.68				5.99
arrollton ‖	O		27					17			68				07			.03	.12		.13	16			.02	.90							2.55
loverport ‖	O		.52								T.		.01		T	14	.57	.14	.20			T	.02	T		.05	.37	.32	03				2.37
dmonton	G																																
ubank	C												.20			1.10	28	.50	09	.35			.52	.31		.06		.09	.62				4.12
rankfort ‖	K		.12								.78		.18			.27	T	.85	T.			2.20	.12	.24	.06	1.00	.89	1.45					8.16
ranklin	G		T									T.			96	3.96	.30		.10	26	T	1.45		.12		T	.10	.42		T			7.67
reensburg ‖	G															.51	.04	.31		.03	.35	.50	27	.28	.08	.02	.09	35	.04				2.87
igh Bridge ‖	K										.51					.12	.70	.12	.10		.76	.50	.34	.03	.05	.09		1.63	.15				5.15
rvington	O		.29											.01	T	.72		.08	.12	T.		.07	.05			89	.24	.07					2.54
unction City	K										.01	.03	.07		T.	.35	.10	.09	.02	.08	.11	1.24	.34	.03	T.	1.09		.63	01				4.20
eitchfield	G		.02									.07			.48	.12	04	20	.66			.22			03		*	1.13					2.97
exington ***	K		04				.01	T.			01	06		T.	.01	23	.08	.08	T	1.07	T.	.29	T	.04	.43	T	.12	33					2.80
oretto	S		T.								T.	T.	.10			.30		.10	.05	.40	15	25	15	.10	05	.05	.45	1.50	35				4.00
ouisville***	O	.19	.59							T		.03		T.	27	.12	.19	.01		.01	T.	T.		.07	03	.04	.07	.24	T				1.86
Do. (Cherokee Park)	O		38							T.		T.	.02		T	.33	.28	.10	.10	.12		.05		.22		.11	.50	.17					2.38
. John	S		05										.05		T.	.20	.70	.89	1.20	.07		.32	.30	.10	T	.10	.87	87	05		.16		5.93
ott	L		.14					02				03	.06	06	.48	41	49	26	.07			.48					.16	.41					3.07
elbyville	S		.45								T.		12			.45	T	1.15	.05		.08		.26	08	.24		.57	1.08	.02				4.57
aylorsville	S		.20							T	T.	T.	T.	T	T.	25	.02	1.66	T.	.66	.01	.41	.20		T.	1.02	.21	.01					4.66
illiamstown	L		.83										.03		.22	87		.12		.30				.18		.01	T.						2.56
oodbury	G		.05	12									.05			55	03		.89	1.10	.90	.20	.92			.08	.04	.31	.42				[illegible]
Easte'a Divisio..																																	
eattyville	K							T.					.20			.77	.12	.55	.20	.19		.11	.48	.47			.15	.05		.50			3.79
erea	K							04				T.	.03		.01	.41	.21		.96		.10	.02	.83	.06	T.		.39	.02					3.08
tlettsburg ‖	B							26					.15			.64	.04	.22		.24			1.10		1.28	.06	.17						4.16
lmouth	L		.92					.34	.11				.20		.09	.80				.54		.02						.15					3.17
rmers	L												.05			.25	.25	.05		.80	.79	1.00											3.19
zard	K																																....
ckson	K										T.		.30		T.	1.63	.70	1.80	20		.10	.28		.92		T.	.50						6.43
ondon ‖	C															.98	.52	.60	.90	.95		.02	.85	.05	.10			35	65				5.97
uisa	B							20			.09		.22			.30		52		.34			.36					.06	42				2.51
anchester ‖	K															.52	.21	.71	1.43	96	.18		.27	.62	.31		.26						5.47
aysville ‡	O		.57	T							.07		.16			1.66	.02	03	.04			T.	3.15			.03	.03	21					5.97
iddlesboro	C												37		.15	1.67	1.42	58				.20	1.14	.21	28		.05	.25					6.32
ount Sterling	L							.40	T				.15	T		.35	.20	.11	T.		05	.10	.30	.10	1.04	.05	.86	.05	.04				3.80
keville	B			90							.15			.35			.42	1.20			.12			.20					.30				3.64
chmond ‡	K												.09			.34	.21	.20	02			.97	.20	52		1.20		.60		.20			4.55
eksbury	B								.20				.06		.03	1.00	1.83	.60						.60			.10	.10	.50				5.02
illiamsburg ‡	C			03				T					T	02		1.62	.13	.98	.02	.17	.35	.02	.48	.42	.02	35	.12	.08	67				5.48

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

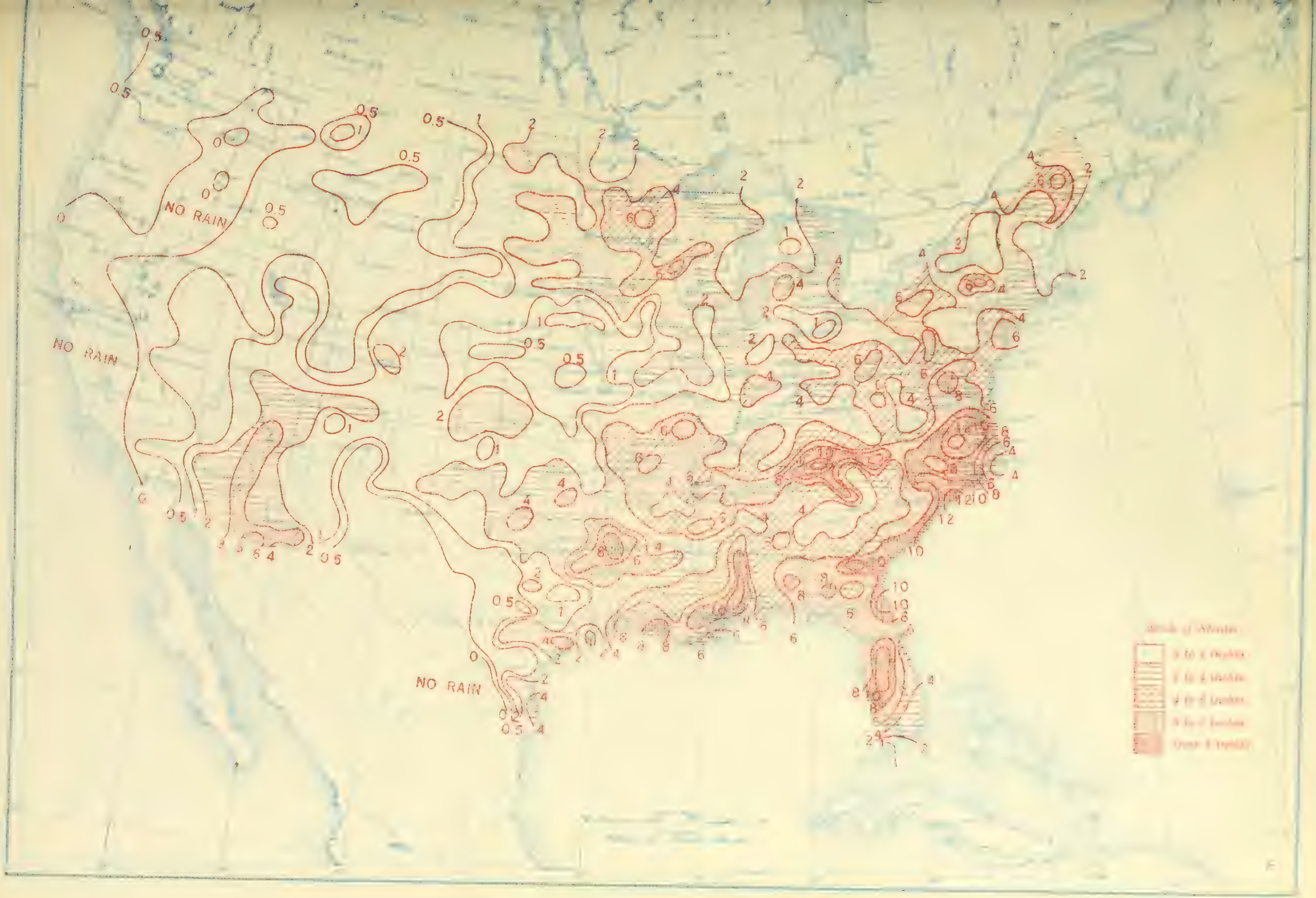
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for July, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	92	81	84	82	86	89	90	88	89	82	86	83	89	82	78	79	80	82	82	88	75	87	83	84	85	89	85	87	91	92	94	85.3
	Minimum	69	67	57	50	65	61	61	66	62	65	56	62	58	64	67	64	65	61	60	62	64	68	66	68	70	71	68	69	67	72	78	64.6
Blandville	Maximum	93	82	85	82	85	83	91	90	89	84	86	84	89	89	75	80	82	82	78	85	82	87	83	84	82	90	83	90	89	91	91	85.4
	Minimum	68	62	63	58	64	66	68	68	69	70	63	67	63	68	66	61	63	65	67	66	68	67	69	69	71	71	71	71	75	74	75	67.3
Calhoun	Maximum	93	86	88	85	89	88	94	92	92	86	88	84	89	86	75	80	85	83	87	90	84	91	88	88	91	94	86	92	96	96	97	88.4
	Minimum	61	65	57	56	60	61	67	64	63	67	57	64	58	68	66	63	63	60	63	61	68	67	67	69	69	69	69	67	69	71	72	64.5
Earlington §§	Maximum	56	85	86	87	92	90	95	94	93	87	91	87	92	93	77	80	86	88	91	92	83	91	85	93	92	96	82	96	99	98	99	90.2
	Minimum	62	67	56	56	58	63	68	66	64	69	57	66	59	72	67	63	66	63	63	61	67	67	70	71	69	63	71	68	72	74	74	65.5
Greenville	Maximum	92	87	86	84	87	87	90	90	90	83	86	84	90	89	77	79	81	83	87	89	79	89	89	87	87	90	87	92	92	91	93	87.0
	Minimum	60	67	57	59	59	62	67	67	63	66	57	66	57	67	63	62	65	62	62	62	69	67	69	70	69	71	70	68	71	71	74	65.1
Hopkinsville §§	Maximum	94	81	86	84	90	86	93	91	91	84	89	84	90	88	76	79	83	85	85	84	80	81	82	84	85	90	83	90	91	93	95	86.4
	Minimum	64	69	59	61	64	65	67	68	66	69	60	66	60	65	66	64	65	62	66	65	69	69	69	71	71	71	71	71	73	73	72	66.8
Marion	Maximum	94	85	84	81	86	83	90	90	91	82	84	85	88	86	76	79	79	83	83	83	84	90	87	85	86	91	90	88	92	92	92	86.1
	Minimum	72	70	70	61	58	..	..	..	..	..	72	62	63	68	67	64	62	64	60	63	62	67	69	70	65	65	62	70	72	72	72	[c]66.2
Mayfield §§	Maximum	92	83	89	84	90	84	94	94	93	87	91	88	92	95	75	79	81	85	83	88	80	90	85	85	85	91	83	94	91	92	93	87.6
	Minimum	62	68	58	58	58	63	65	66	67	69	59	61	61	62	65	63	62	64	66	64	66	66	59	59	71	71	70	68	70	72	73	64.7
Owensboro §§	Maximum	93	83	84	82	85	88	93	89	90	82	87	83	89	80	73	78	81	80	87	87	81	88	85	88	90	91	81	89	92	91	93	85.9
	Minimum	64	69	68	61	61	62	66	66	65	68	60	65	60	68	68	63	63	61	64	63	69	70	68	70	71	70	71	70	73	73	74	66.6
Paducah (Lone Oak)	Maximum	86	81	77	79	81	87	92	84	87	86	88	89	90	91	82	72	72	88	86	89	86	96	88	93	91	97	86	97	98	98	96	87.5
	Minimum	64	65	63	68	64	63	67	65	69	68	64	68	63	65	66	59	62	65	65	66	68	68	70	70	71	73	70	71	71	73	75	67.1
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	..	..	..	84	91	87	93	90	91	84	89	84	90	90	78	80	81	88	86	89	81	88	84	87	84	90	88	92	93	92	93	[c]87.4
	Minimum	60	67	57	60	61	63	65	67	61	63	56	61	57	61	65	63	64	61	63	64	63	68	77	68	74	68	69	69	72	71	72	64.8
Central Division.																																	
Alpha	Maximum	85	80	81	82	84	84	84	87	83	83	80	83	82	90	76	72	75	76	77	81	73	76	79	80	80	79	79	83	86	85	87	81.0
	Minimum	62	75	67	63	60	73	72	66	62	71	59	72	54	76	66	69	64	68	65	70	69	70	72	68	71	70	72	72	69	74	72	68.2
Anchorage	Maximum	94	82	83	82	83	89	90	83	89	80	82	81	87	81	77	81	79	86	87	89	80	87	90	89	89	86	87	90	94	93	94	85.9
	Minimum	60	65	54	52	57	62	65	58	65	66	52	60	55	69	67	61	63	58	58	62	65	66	66	66	65	67	69	69	69	20	71	63.0
Bardstown §§	Maximum	94	85	89	88	94	92	93	92	93	85	84	85	91	85	88	80	83	84	90	91	81	92	89	93	91	90	86	95	94	94	97	89.3
	Minimum	58	67	53	59	58	62	67	64	61	64	55	63	56	68	67	62	61	59	60	63	66	69	68	66	66	70	70	69	70	71	70	63.9
Bowling Green §§	Maximum	97	81	91	88	91	90	94	95	91	87	..	87	90	90	80	81	86	87	89	93	81	91	88	90	85	91	83	95	97	96	97	[a]89.4
	Minimum	61	70	60	62	62	64	67	67	64	65	59	..	56	60	66	65	64	61	64	64	69	69	69	69	70	69	69	68	71	71	76	[a]65.6
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	88	84	84	85	88	85	88	88	86	83	83	84	86	88	73	75	80	81	82	85	78	82	87	86	85	85	82	89	91	90	92	84.6
	Minimum	56	63	57	60	58	62	67	63	57	59	52	60	51	58	58	64	62	63	62	62	67	67	67	66	66	67	67	67	67	69	68	62.3
Frankfort	Maximum	93	89	84	81	83	90	90	88	86	82	80	81	85	84	79	80	81	83	88	87	77	84	90	90	89	83	85	89	93	94	95	85.9
	Minimum	61	67	56	58	57	61	68	64	61	60	55	65	56	67	67	65	61	59	59	64	65	67	67	68	69	68	68	69	71	72	71	64.1
Franklin	Maximum	90	85	85	83	90	86	91	89	89	84	89	85	90	91	75	79	80	84	85	85	78	85	84	86	84	90	82	88	91	90	92	86.0
	Minimum	64	69	61	62	75	61	68	69	65	69	61	69	62	66	65	65	64	63	66	64	68	69	69	70	69	69	69	70	73	72	73	67.1
Greensburg §§	Maximum	91	80	86	85	88	90	92	91	89	86	87	87	83	89	75	81	82	86	82	88	75	84	87	88	86	91	83	90	93	93	95	86.5
	Minimum	58	64	56	59	57	60	66	64	58	60	55	67	50	70	66	63	60	60	61	65	70	62	67	67	68	68	68	64	69	70	69	63.3
Irvington	Maximum	92	86	83	81	84	88	90	86	87	81	84	81	88	82	72	80	80	81	87	88	81	86	88	89	90	88	83	90	92	93	94	85.6
	Minimum	65	67	68	59	61	63	70	65	65	67	60	63	60	60	68	64	64	61	62	64	70	70	68	69	71	71	71	71	72	75	75	66.4
Junction City	Maximum	90	85	86	86	89	89	90	89	88	81	83	84	86	87	74	76	83	85	87	84	78	85	88	88	87	89	84	93	94	93	96	86.4
	Minimum	56	68	52	59	57	58	65	66	57	59	53	65	50	70	64	64	62	59	59	63	58	67	66	66	69	69	67	68	68	73	69	62.8
Leitchfield	Maximum	93	85	87	85	90	89	93	90	89	82	85	84	89	84	76	80	82	82	85	90	79	87	87	86	87	90	81	90	92	92	94	86.6
	Minimum	61	68	56	60	61	62	68	66	62	67	65	65	57	70	66	62	64	59	63	62	68	69	67	68	69	69	68	68	69	71	72	65.2
Lexington	Maximum	89	78	81	80	82	89	87	82	85	75	77	79	84	79	70	75	79	81	82	82	74	84	83	90	86	80	82	87	91	90	92	82.4
	Minimum	67	66	66	61	61	68	69	65	65	64	58	65	62	67	65	64	63	64	60	67	68	69	69	69	69	69	68	69	73	75	74	66.4
Loretto	Maximum	91	90	87	86	90	89	90	92	93	89	84	86	89	90	81	80	82	83	86	86	79	84	87	89	90	90	86	92	93	93	100	88.0
	Minimum	60	68	53	57	55	60	68	63	58	61	54	74	55	73	66	62	62	59	60	63	66	68	68	65	67	69	68	68	69	70	70	63.8
Louisville	Maximum	93	82	84	81	84	87	91	83	88	78	80	80	86	81	76	79	78	82	87	90	78	86	88	89	87	85	85	90	93	94	94	85.1
	Minimum	70	67	61	60	61	68	72	65	69	63	61	66	64	69	68	64	64	62	64	66	69	70	70	70	72	71	71	74	74	76	77	67.7
Do. (Cherokee Park)	Maximum	91	86	81	79	80	85	88	86	84	82	77	78	85	83	76	79	78	81	83	86	80	85	86	87	85	82	83	87	90	90	92	83.7
	Minimum	62	65	56	55	57	61	68	62	63	61	58	64	57	71	67	63	62	59	59	61	66	67	67	67	68	68	69	69	70	73	73	64.1
St. John §§	Maximum	92	92	87	84	86	89	92	89	89	82	86	86	89	83	72	88	79	81	86	87	75	87	87	88	86	89	84	91	93	93	94	86.6
	Minimum	58	66	55	58	59	62	64	63	59	66	55	63	54	65	56	62	62	59	61	63	62	69	66	66	69	70	69	69	70	70	71	63.3
Scott	Maximum	90	82	83	78	83	86	89	80	88	78	73	79	82	78	80	77	78	77	84	88	81	83	90	88	84	81	87	89	92	91	94	83.6
	Minimum	64	68	55	54	57	61	69	61	61	59	53	57	56	61	63	63	62	60	58	62	63	64	66	68	68	69	69	67	72	74	73	63.1
Shelbyville §§	Maximum	92	83	84	84	87	91	92	89	91	82	81	83	90	82	75	79	82	82	85	88	79	87	91	89	88	86	85	93	93	92	95	86.5
	Minimum	61	66	55	56	56	61	66	67	61	63	52	56	56	64	66	63	61	59	59	63	63	68	67	67	69	69	68	68	70	70	71	63.3
Taylorsville	Maximum	93	84	84	81	86	88	92	83	88	79	82	82	89	81	74	79	81	81	84	85	77	87	88	87	86	86	85	90	92	92	94	85.2
	Minimum	59	68	54	57	55	60	67	62	61	66	54	66	52	71	68	62	62	59	58	62	66	64	68	68	69	70	70	68	71	72	70	63.8
Williamstown §§	Maximum	93	82	79	82	85	91	90	82	89	77	74	81	84	77	79	78	79	82	84	87	81	87	90	92	86	83	90	93	93	92	94	85.0
	Minimum	66	66	59	58	59	62	67	61	64	62	54	57	60	65	66	65	63	60	59	62	66	67	68	69	68	70	69	71	72	74	74	64.6
Eastern Division.																																	
Beattyville §§	Maximum	95	94	88	88	90	93	94	78	88	86	82	90	90	86	75	69	82	80	82	80	76	79	82	82	83	84	78	83	87	84	86	84.3
	Minimum	59	61	61	57	56	60	62	64	61	60	58	54	54	64	65	63	64	62	62	62	64	62	68	63	62	63	62	68	69	71	62	62.0
Berea	Maximum	81	81	76	74	82	84	90	91	83	80	83	86	81	88	75	74	81	80	84	83	76	83	87	90	87	84	81	87	91	92	94	83.5
	Minimum	70	74	56	58	68	66	63	64	60	63	56	66	54	68	65	64	62	61	63	67	66	69	69	66	68	69	68	66	69	76	70	65.3
Farmers	Maximum	96	88	86	80	88	90	90	83	88	77	83	86	83	84	75	72	80	83	87	87	80	86	92	95	88	88	78	91	95	90	95	85.9
	Minimum	66	62	54	57	53	56	62	62	58	57	52	59	51	62	64	63	63	59	55	53	61	65	65	65	66	67	66	68	67	68	65	61.0
Maysville §§	Maximum	95	83	82	84	87	92	92	85	88	74	78	83	82	88	82	79	84	86	87	88	84	89	91	93	92	88	90	92	96	95	97	87.3
	Minimum	64	66	54	55	54	56	65	63	60	61	54	57	54	63	61	64	65	66	58	62	66	62	66	67	67	68	69	71	68	71	70	62.8
Middlesboro	Maximum	88	88	83	84	87	85	88	90	84	85	84	82	82	85	78	73	77	78	81	82	78	85	81	85	83	85	83	87	89	90	90	83.9
	Minimum	58	61	66	55	58	58	63	64	58	59	54	60	60	70	65	67	64	64	61	62	64	68	68	67	67	66	67	70	71	71	70	63.7
Mount Sterling §§	Maximum	90	84	83	81	84	90	90	84	83	76	80	83	84	83	73	76	83	84	85	86	79	86	88	91	89	86	84	86	93	93	94	84.9
	Minimum	61	68	55	60	59	61	64	64	60	59	54	63	54	71	64	64	63	62	58	62	65	66	65	64	66	69	68	70	65	73	71	63.5
Richmond §§	Maximum	90	77	84	80	83	90	90	88	82	80	80	82	84	79	69	74	80	80	84	83	74	76	85	90	83	82	78	85	92	93	94	82.9
	Minimum	61	70	58	61	60	65	69	70	64	64	57	66	60	69	64	64	63	65	63	65	67	68	67	69	68	69	68	70	71	72	72	65.8
Weeksbury	Maximum	92	89	84	87	88	90	88	88	86	84	81	83	84	88	78	78	80	80	82	83	80	84	86	85	82	78	80	86	94	92	93	84.9
	Minimum	57	62	67	56	58	60	77	59	63	59	55	63	58	67	56	63	63	61	67	70	67	70	70	72	65	65	70	70	70	68	69	64.4
Williamsburg §§	Maximum	93	89	87	88	91	89	91	90	88	86	86	82	88	91	78	73	82	83	81	86	85	84	88	88	87	88	83	89	94	93	95	87.0
	Minimum	54	58	66	58	57	61	64	66	60	58	53	60	56	60	70	66	64	62	58	63	65	66	67	67	68	67	68	71	71	70	70	63.4

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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OCT 8 1917

CLIMATOLOGICAL DATA

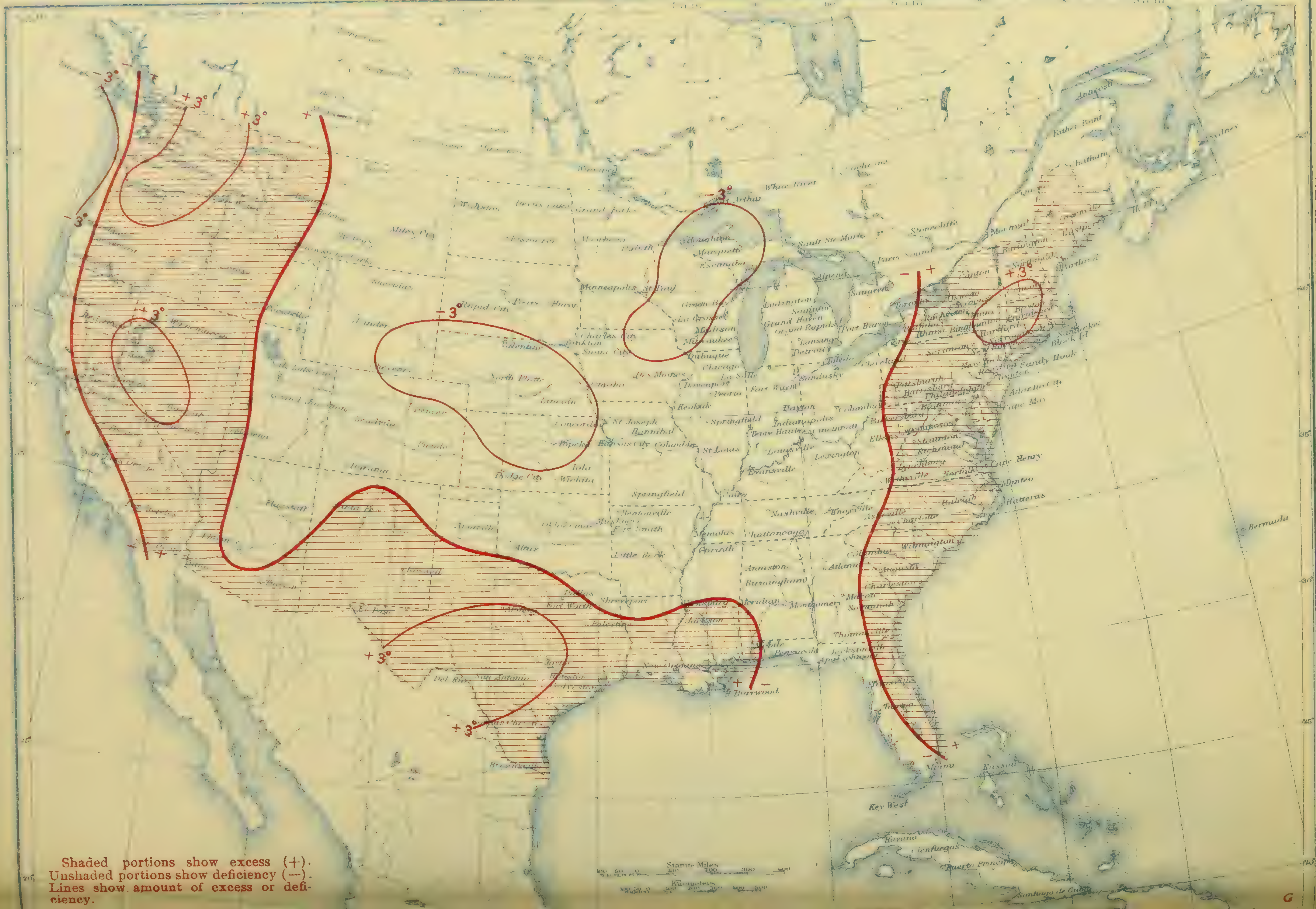
KENTUCKY SECTION

AUGUST, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 24, 1917

Departure of the Mean Temperature from the Normal, August, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

G

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

L. XXII. LOUISVILLE, KY., AUGUST, 1917. No. 8

GENERAL SUMMARY.

Warm weather prevailing at the close of July continued rough the first week of August, producing the most favorable owing period that has occurred this season. This favorable ather was followed by several cool days, but seasonable tempatures again prevailed during the second decade. Abnormally ol weather obtained during the fourth week. Most of the ghts during the second and third decades were too cool to vor rapid growth of corn, which crop was 10 to 15 days late its seasonal advancement at the close of the month. The mperature for the month averaged below normal, a condition at has prevailed each month during the entire growing season, from April to August, inclusive.

Precipitation averaged slightly above normal, but was unenly distributed over the State and also through the month. ring the first two decades rainfall was light in most of the rthern and eastern counties. The rains of the 21st-24th and th-31st, however, reached most of the agricultural districts of e State, especially the blue grass region where the need of oisture had become acute. At the close of the month good owing conditions prevailed in the central and western counties; so farmers were making excellent progress with fall plowing, e soil moisture being ample to facilitate this work in most alities.

PRESSURE.

Shallow areas of low pressure passed frequently over or near e State during the month, but they were generally centered to e northward and produced only local showers. An exception s the disturbance of the 28-29th which moved in from the uthwest, bringing generous rains to most localities. During st of the month high pressure areas were dominant.

The mean sea-level pressure, based on the reports of two stans, was 30.03 inches. The extremes were 30.24 inches on e 26th and 29.67 inches on the 23d, both at Louisville.

TEMPERATURE.

The average temperature for the State, determined from the ports of 40 stations, was 73.9°, or 1.8° below normal. Maxium temperatures of 90° or higher occurred generally during e first week, but thereafter maxima were moderate and minima nerally quite low. Minimum temperatures ranged between ° and 60° on about half the days during the last two decades, ile on the 26th they ranged between 40° and 50° at most tions. The extremes were 100° at Paducah on the 1st and at rlington on the 4th, and 42° at Junction City and St. John the 26th.

PRECIPITATION.

The average precipitation, based on reports from 53 stations, s 3.49 inches, which is 0.14 inch above normal. The disbution over the State was remarkably irregular, amounts at e various stations ranging between 0.98 inch at London and 80 inches at Pikeville. Over most of the central counties m Grayson, Spencer and Mercer southward to the Tennessee rder, and also over small areas in the extreme eastern and treme western parts of the State, from 4 to 8 inches occurred. the other counties amounts were generally less than 3 inches; ile there was a considerable area extending from Bourbon uthward to Clay County across the headwaters of the Licking, entucky, and Cumberland rivers, and also along the Ohio iver from Cincinnati to Evansville, where less than 2 inches occurred. The principal periods with rainfall were 8-9th, 14-17th, 21st-24th, and 29th-31st. Thunderstorms were frequent during the first and third of these periods. The heavy rains were generally local, and in some cases damaging. Some of the heaviest 24-hour amounts were; 3.64 inches at Blandville and 3.00 at Leitchfield on the 15th. At Louisville 2.71 inches occurred in two hours on the 29th, of which 0.74 inch fell in five minutes.

WIND.

The total wind movement at Louisville was 6,342 miles, and at Lexington 7,277 miles, with average hourly velocities of 8.5 and 9.8 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 40 miles per hour from the northwest on the 23d, and at Lexington 46 miles per hour from the west on the 29th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 76 per cent, at 2 p. m. 48 per cent, and at 7 p. m. 54 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 64 and at Lexington 58.

MISCELLANEOUS.

August 1.—There was one death and one prostration from heat at Louisville.

August 5.—Five prostrations from heat occurred at Louisville.

August 10.—A hailstorm in Warren County damaged corn and tobacco.

August 22.—A boy was seriously injured by lightning near Grahamville, McCracken County.

August 28.—A barn was destroyed by lightning near Frankfort.

August 29.—A heavy rainstorm at Louisville flooded basements and streets, and demoralized car service, causing damage estimated at $150,000.

Augnst 30.—A wind, rain and hailstorm caused extensive damage to corn and tobacco near Clintonville, Bourbon County.

Rivers:—In the Ohio River pool stages were maintained during the month in sections where dams have been constructed. In other sections stages became very low.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with 0.01 or more.
1889	70.6	−5.1	100	43	1.23	−2.12	
1890	73.2	−2.5	101	44	6.16	+2.81	
1891	72.9	−2.8	105	43	5.82	+2.47	..
1892	75.4	−0.3	96	45	3.13	−0.22	.
1893	74.8	−0.9	99	48	1.72	−1.63	
1894	77.1	+1.4	105	41	3.02	−0.33	
1895	76.6	+0.9	102	49	2.15	−1.20	6
1896	77.1	+1.4	105	41	2.83	−0.52	5
1897	75.2	−0.5	101	49	2.33	−1.02	6
1898	76.7	+1.0	100	55	3.83	+0.48	7
1899	78.1	+2.4	102	51	3.09	−0.26	6
1900	80.4	+4.7	104	52	2.74	−0.61	6
1901	75.5	−0.2	101	50	5.12	+1.77	12
1902	75.6	−0.1	103	45	2.48	−0.87	7
1903	75.5	−0.2	100	49	3.27	−0.08	8
1904	75.2	−0.5	100	45	2.64	−0.71	8
1905	75.7	0.0	99	42	3.82	−0.47	9
1906	77.4	+1.7	99	45	4.37	+1.02	10
1907	74.8	−0.9	99	48	4.27	+0.92	10
1908	76.3	+0.6	104	49	2.79	−0.56	6
1909	76.9	+1.2	104	45	2.60	−0.75	7
1910	74.0	−1.7	100	46	2.72	−0.63	6
1911	76.2	+0.5	106	45	4.03	+0.68	10
1912	73.7	−2.0	98	43	4.71	+1.36	13
1913	78.0	+2.3	108	44	2.81	−0.54	7
1914	76.0	+0.3	100	49	5.94	−2.59	12
1915	71.3	−4.4	100	42	6.29	+2.94	14
1916	77.0	+1.3	101	47	4.25	+0.90	9
1917	73.9	−1.8	100	42	3.49	+0.14	8

Climatological data for August, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	14	72.6	− 3.6	93	1	46	26	36	4.35	+1.01	1.30	0	8	20	2	9	w.	Mrs. Della M. Davis.
Blandville	Ballard	445	35	74.3	− 2.5	92	4	54	26	26	5.97	+2.95	3.64	0	7	11	13	7	se.	E. W. Horr.
Calhoun	McLean	437	13	75.2	− 2.3	98	1	50	26	36	4.55	+1.19	2.20	0	5	11	17	3	sw.	W. A. Taylor.
Earlington	Hopkins	420	26	76.2	− 0.4	100	4†	49	26	43	2.46	−0.86	0.85	0	6	23	1	7	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	^{a}74.0	......	95a	4†	48^{a}	26	36^{a}	3.67	......	1.05	0	6	16^{a}	11^{a}	3^{a}	w.	C. R. Lovell.
Hopkinsville	Christian	524	20	74.8	− 3.0	95	1	51	26	32	2.40	−0.65	1.20	0	4	19	0	12	e.	W. F. Randle.
Marion	Crittenden	571	18	74.6	− 3.6	95	5	48	26	35	3.53	−0.74	1.40	0	4	19	7	5	w.	B. C. Paris.
Mayfield	Graves	364	7	74.6	− 2.7	96	5	50	26	36	3.29	+0.05	1.60	0	7	9	15	7	s.	J. N. Davis.
Owensboro	Daviess	479	20	74.0	− 2.4	94	1†	51	26	31	1.62	−1.97	0.58	0	7	17	10	4	s.	Henry S. Berry.
Paducah	McCracken	341	17	77.8	− 2.7	100	1†	54	26	35	3.25	+0.29	1.80	0	8	21	0	10	n.	E. Futrell, Jr.
Princeton	Caldwell	529	8	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	
Russellville	Logan	590	5	74.2	......	94	1	46	26	37	2.11	−0.42	1.50	0	5	21	6	4	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	72.0	− 4.1	89	1	50	26	28	5.25	+1.02	1.90	0	8	12	10	9	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	73.4	− 1.2	96	1†	47	25†	41	1.91	−1.67	0.44	0	6	19	9	3	sw.	C. E. Barret.
Bardstown	Nelson	637	20	75.0	− 2.2	98	1†	46	26	42	4.18	+0.57	1.45	0	6	17	4	10	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	^{a}75.9	− 3.0	99^{b}	1	49	26	37^{b}	3.08	−0.44	1.40	0	6	18	10	3	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	......	......	......	......	......	......	......	......	4.38	......	1.93	0	8	......	......	......	......	James H. Young.
Burnside	Pulaski	773	24	......	......	......	......	......	......	......	4.24	+0.13	1.20	0	12	......	......	......	......	C. L. Hurt.
Carrollton	Carroll	......	......	......	......	......	......	......	......	......	1.76	−0.67	0.84	0	10	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	3	......	......	......	......	......	......	......	1.56	......	0.51	0	6	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	23	73.1	− 1.9	94	1	52	25	31	6.46	+3.07	1.10	0	13	12	13	6	w.	P. W. Ray.
Eubank	Pulaski	1177	22	^{a}72.8	− 1.0	93a	1†	44^{a}	26	37^{b}	6.34	+2.39	3.06	0	10	12^{a}	7^{a}	11^{a}	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	74.0	− 0.7	95	1	54	18†	34	3.71	+0.29	1.80	0	7	18	4	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	73.7	− 3.5	93	1	51	26	27	2.72	−0.58	1.06	0	8	3	24	4	se.	J. E. Newman.
Greensburg	Green	581	24	73.0	− 2.6	97	1	45	26	36	8.51	+4.87	2.60	0	14	7	6	18	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	......	......	......	......	......	......	......	4.23	+0.36	1.89	0	9	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	19	74.4	− 1.6	95	1	51	26	29	2.52	−1.08	0.84	0	6	19	7	5	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	73.0	− 1.3	96	1	42	26†	39	4.49	+1.36	1.56	0	12	18	12	1	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	73.6	− 1.8	94	1†	48	26	35	4.51	+0.84	3.00	0	7	18	8	5	sw.	John E. Stone.
Lexington	Fayette	989	29	74.4	− 0.2	92	1	56	25	24	1.94	−1.63	1.08	0	11	15	10	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	73.9	− 1.3	97	1	45	26	39	3.10	−0.56	1.20	0	10	15	10	6	......	Loretto Academy.
LOUISVILLE	Jefferson	525	44	75.5	− 1.0	95	1	55	26	29	4.05	−0.54	2.94	0	8	12	10	9	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	7	72.8	......	93	1	50	26	33	2.04	......	0.89	0	5	12	12	7	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	73.4	− 1.3	95	1	42	26	41	3.38	−0.25	1.95	0	7	23	1	7	......	Sisters of Loretto.
Scott	Kenton	900	19	73.5	− 1.6	94	1†	52	26	38	2.08	−1.46	0.54	0	11	12	13	6	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	73.8	− 1.7	97	20	48	26	40	2.40	−0.63	0.72	0	8	14	12	5	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	72.2	− 2.2	95	1	47	26	37	4.36	+0.64	2.55	0	9	15	9	7	se.	E. D. Bourne.
Williamstown	Grant	943	14	75.2	+ 1.4	97	20	53	26	35	3.13	−1.01	0.82	0	11	15	7	9	......	Miss Rose Carter.
Woodbury	Butler	390	..	......	......	......	......	......	......	......	2.11	......	0.99	0	7	..	..	..	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	......	......	......	......	46	26	......	1.67	−2.96	0.67	0	6	20	4	7	se.	A. H. Bowman.
Berea	Madison	1070	15	73.4	− 1.2	94	1	45	26	39	3.12	−1.82	2.20	0	5	26	3	2	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	......	......	......	......	......	......	......	1.97	−2.13	0.70	0	5	......	......	......	......	Forester Farley.
Falmouth	Pendleton	600	28	......	......	......	......	......	......	......	2.96	−0.54	0.82	0	9	22	4	5	......	J. V. Oldham.
Farmers	Rowan	668	9	73.4	− 0.4	96	20	45	25†	45	2.40	−2.42	0.60	0	8	25	1	5	w.	Durwood Cassity.
Hazard	Perry	......	1	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	
Jackson	Breathitt	776	5	......	......	......	......	......	......	......	3.57	......	1.70	0	3	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	2	......	......	......	......	......	......	......	0.98	......	0.22	0	8	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	13	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	F. C. Sammons
Manchester	Clay	1400	7	......	......	......	......	......	......	......	1.30	......	0.92	0	2	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	74.2	− 1.5	98	1†	46	26	39	2.15	−1.83	0.58	0	10	17	6	8	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	72.2	− 2.2	90	1	49	26	31	5.14	+1.61	1.08	0	12	18	13	0	......	B. H. Perkins.
Mount Sterling	Montgomery	930	27	73.2	− 0.7	94	1	46	26	38	1.57	−2.37	0.51	0	7	21	6	4	s.	W. R. McKee.
Pikeville	Pike	634	11	......	......	......	......	......	......	......	8.80	+5.28	1.76	0	11	......	......	......	......	I. M. Williams.
Richmond	Madison	926	23	73.7	− 1.9	95	1	50	26	33	2.50	−0.70	1.15	0	6	21	4	6	s.	J. W. Crooke.
Weeksbury	Floyd	1216	3	70.7	......	92	1	43	18	44	6.93	......	2.20	0	11	14	13	4	......	O. A. Lund.
Williamsburg	Whitley	939	19	74.4	− 1.7	94	1	49	27	39	4.38	−0.14	0.98	0	13	16	4	11	s.	N. C. Jones.
State averages and extremes		......	......	73.9	......	100	1†	42	26†	45	3.49	......	3.64	0	8	16	8	7	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

T Precipitation is less than 0.01 inch rain or melted snow

† Also on other dates. †† Received too late to be included in means and summaries.

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.

Daily Precipitation for August, 1917.

Stations.	Day of month																															Total.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam‖ G.								.99							.40	.06	1.02					.17	.36	.05						1.30		4.35
Blandville M.					T.		.59							.03	3.64	1.36					.22							.09	.04			5.97
Calhoun G.								.63					T.		.32	2.20					1.38	T.	T.						T.	.02		4.55
Earlington‖ G.								.44							.16	.85	.57						.23	T.						.21		2.46
Greenville G.								.92							.67	.35						1.05	.28							.40		3.67
Hopkinsville‖ C.								T.							.20	.75						T.	1.20							.25		2.40
Marion O.								1.40							.50	1.20					T.	.43								T.		3.53
Mayfield‖ M.								.15							1.05	1.60	.05					.05	.15							.24		3.29
Owensboro‖ O.								.47						T.	.14		.23					.15	.02	.03						.58		1.62
Paducah O.		.01						.26							1.80	.55					.42	.10	.04						.07			3.25
Princeton G.																																
Russellville‖ G.								1.50								.31	.12					.12	.06									2.11
Central Division.																																
Alpha C.									.15				.25	T.	1.90	.25				T.	1.60	.65							.25	.30		5.35
Anchorage O.								T.					T.		.27						.21	.44	T.	.40					.35	.24		1.91
Bardstown‖ S.								.14							.70							1.04	1.45	.10						.75		4.18
Bowling Green‖ G.								1.40							.20	.20						.05	T.	.05						1.18		3.08
Brownsville‖ G.								1.93							.19	.09	.96	.14				.03	.58							.46		4.38
Burnside‖ C.			.50				T.	.10	T.	.18				.34	.13	.89	1.20	.07				.22	.05	.30						.26	T.	4.24
Carrollton‖ O.								.07	.08	.03				T.	.01							.06	.46	.15					.05	.84	.01	1.76
Cloverport‖ O.								.51							.19	T.	.04					.23	.28							.31		1.56
Edmonton G.							.63		.46				.72		.99	.86	.08				.80	1.10		.15		.06		.03	.06		.52	6.46
Eubank‖ C.								.27						.18	.34	.12	.22					.34	3.06	.30						.43	1.08	6.34
Frankfort‖ K.								.19	.02						T.							.23	1.80	.38						1.06	.03	3.71
Franklin G.								1.06	.13				T.	T.	.38	.29					.06	.12	T.						.10		.58	2.72
Greensburg‖ G.								2.60	.01	.10			.21	1.00	1.08	.02	1.24					.42	1.02	.01					.23	.09	.48	8.51
High Bridge‖ K.								.46	.02					.08	.20							.56	1.89	.15						.42	.45	4.23
Irvington O.								.32							.40	T.					.17	.84							.57	.22		2.52
Junction City K.								.83	.23	T.			.28	.27	.25	.07	.02	T.			T	1.56		.26		.02				.47	.23	4.49
Leitchfield G.								.63						.40	3.00						*	.20	.02						.26		T.	4.51
Lexington *** K.							.02	.16	.02				.05		.01							1.08	.03					.20	.16	.04	.17	1.94
Loretto S.							.05	.70					.05		.35	.15					.15	1.20						.25	.10	.10	T.	3.10
Louisville*** O.							.13	.03						T.	.30						.07	.26	.32						2.71	.23	T.	4.05
Do. (Cherokee Park) O.								.20							.32						.11		.52							.89		2.04
St. John‖ S.								.42	T.					T.	.11	.12						1.95	.50	.03						.25		3.38
Scott L.						.49		.17	.05				.01		.02						.22	.41	.01	.13					.03	.54	T	2.08
Shelbyville‖ S.									.06		.14				.03							.10	.72	.25					.60	.50		2.40
Taylorsville S.							T.	T.	.03				T.		.07	T					.07	2.55	.03	.88				.01	.67	.05	T.	4.36
Williamstown‖ L.						.04		.02		.03	.60			.03	.03							.30	.57	.60						.82	.09	3.13
Woodbury‖ G.								.19							.47	.09	.18					.99	.14	.05								2.11
Eastern Division.																																
Beattyville‖ K.									.62							.02	.10					T.	.67							.20	.06	1.67
Berea K.							T.	T.					.04		.37							2.20							.16		.35	3.12
Catlettsburg‖ B.		.22							.47					.04									.54							.70		1.97
Falmouth‖ L.								.02	.05				.45		T.							.35	.66	.25					.20	.82	.10	2.90
Farmers L.								.40	.30					.10								.35	.10						.38	.17	.60	2.40
Hazard‖ K.																																
Jackson‖ K.									1.00						T.	T.							1.70							.87	T.	3.57
London‖ C.								.20	.05						.22	.11						.02	.13	.10				.15				0.98
Louisa B.																																
Manchester‖ K.																.38							.92									1.30
Maysville‖ O.									.01	T.	.04		T	T.	.02	T.						.58	.47	.46				.04	.05	.42	.06	2.15
Middlesboro C.		.22					.09	.67	.16					.33	1.08	.22	.04				.13		1.07							.76	.37	5.14
Mount Sterling‖ L.								T	.13	T.	T.			.08	.07							.51	.43	.04						.31	T.	1.57
Pikeville‖ B.			1.50					.10	1.20	1.30			.80	.45	.45			.20					1.76	.34						.70		8.80
Richmond‖ K.								T.						T.	.05	.05	.20					.45	1.15	T						.60	T.	2.50
Weeksbury B.							.60	.20	.25	.20				.25	.18		.20					2.20	1.10							.90	.85	6.93
Williamsburg‖ C.			.98				.02	T.	.20	.28				.03	.16	.65	.61	.08				T.	.60	.17						.50	.10	4.38

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

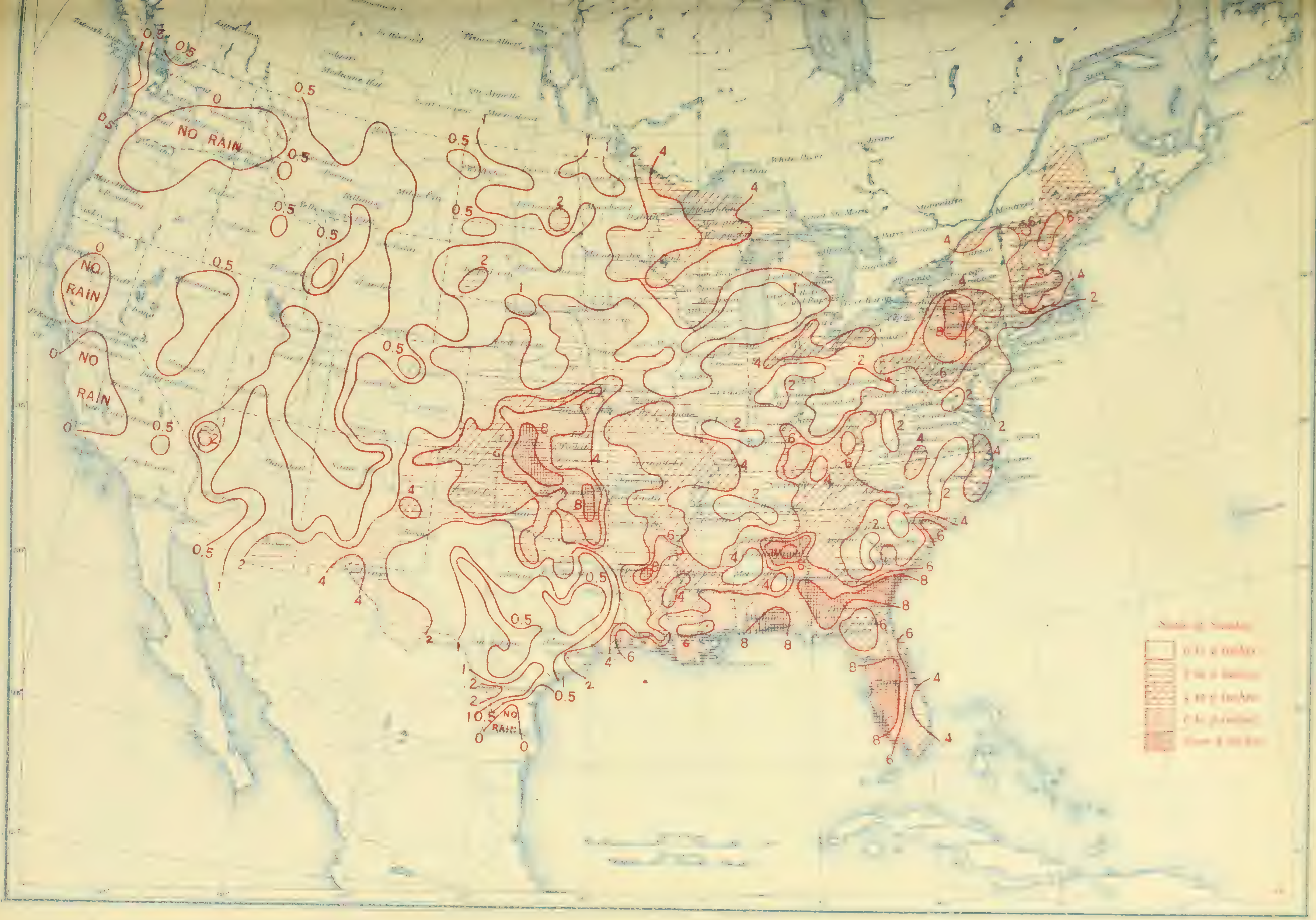
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	93	84	90	90	91	88	89	86	82	77	81	83	82	84	80	81	86	83	86	88	86	81	83	80	76	82	86	88	81	70	82	83.8
	Minimum	72	70	60	62	64	65	66	68	67	58	57	56	60	64	65	70	62	60	56	59	62	67	68	56	54	46	50	55	60	62	58	61.3
Blandville	Maximum	91	87	91	92	91	89	88	88	88	77	81	80	80	84	84	83	88	84	86	87	83	83	80	80	77	78	83	84	71	74	81	83.6
	Minimum	75	70	65	66	67	68	69	69	68	58	57	57	66	69	67	70	69	69	69	67	71	69	69	60	57	54	60	63	60	59	59	65.0
Calhoun	Maximum	98	92	95	97	96	93	92	91	88	81	86	87	85	91	86	87	92	90	91	92	92	87	87	83	79	85	88	90	82	76	87	88.6
	Minimum	70	69	59	64	64	65	65	67	65	55	55	57	63	65	69	69	62	60	59	62	66	68	68	57	52	50	54	58	60	59	57	61.7
Earlington §§	Maximum	99	92	99	100	100	97	94	92	88	82	87	88	85	93	85	85	92	91	95	96	95	85	88	85	81	90	93	95	79	76	89	90.2
	Minimum	72	71	59	63	63	67	67	69	67	59	54	55	63	65	69	70	62	63	58	60	63	70	69	57	53	49	50	59	63	60	57	62.1
Greenville	Maximum	94	90	92	95	95	92	91	89	89	79	82	84	82	88	82	83	89	85	89	92	90	82	85	82	..	84	86	89	80	73	81	a86.5
	Minimum	69	69	59	63	63	65	62	68	67	58	55	56	63	63	70	61	63	63	57	59	66	66	65	56	..	48	52	58	62	60	58	a61.5
Hopkinsville §§	Maximum	95	90	92	94	92	88	89	91	88	79	84	82	80	85	83	80	89	88	89	91	87	75	85	83	79	81	85	89	79	72	85	85.5
	Minimum	73	71	62	66	67	72	66	69	71	69	56	69	59	66	64	70	64	66	60	62	62	70	68	59	58	51	53	60	62	60	60	64.0
Marion	Maximum	93	93	92	94	95	91	89	90	84	84	84	83	84	80	89	84	90	89	90	89	87	84	86	85	82	77	83	86	88	76	85	86.6
	Minimum	68	70	67	65	65	63	63	68	70	68	67	67	64	70	66	64	68	62	61	60	64	66	64	61	55	48	50	54	58	55	50	62.6
Mayfield §§	Maximum	94	91	94	95	96	93	90	92	91	83	86	86	85	85	90	85	92	87	90	90	87	86	88	83	80	83	87	86	77	75	85	87.5
	Minimum	74	69	59	60	64	65	65	66	66	57	51	52	55	68	68	68	65	65	64	64	65	68	67	60	53	50	51	61	59	60	57	61.8
Owensboro §§	Maximum	94	89	90	94	93	89	86	86	80	78	83	83	82	86	83	83	87	86	87	83	89	82	85	81	80	82	85	88	80	71	81	84.7
	Minimum	73	72	62	66	69	66	67	68	67	59	58	60	62	65	69	70	64	64	57	63	63	69	70	59	53	51	54	60	64	60	60	63.4
Paducah (Lone Oak)	Maximum	100	92	95	100	98	93	94	95	88	87	90	89	90	95	90	87	91	91	90	92	93	89	90	88	81	85	91	90	86	78	90	90.6
	Minimum	75	69	64	67	68	68	67	67	69	57	55	60	67	66	68	71	67	66	67	67	70	69	69	66	56	54	60	63	64	59	58	64.9
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	94	89	91	93	92	90	89	89	87	84	83	80	82	87	84	85	89	86	89	91	90	82	85	83	77	83	88	88	85	71	87	86.2
	Minimum	70	70	68	61	68	64	65	67	69	59	58	56	58	65	66	67	63	62	56	58	60	68	66	59	57	46	55	59	63	61	60	62.1
Central Division.																																	
Alpha	Maximum	89	84	84	85	84	85	72	77	83	75	79	83	77	77	73	75	81	80	82	82	83	72	77	73	70	75	82	82	82	75	70	79.0
	Minimum	72	75	62	60	64	66	66	70	66	59	55	60	71	69	70	70	63	60	62	72	65	70	67	65	60	50	54	72	65	65	67	64.9
Anchorage	Maximum	96	89	92	94	95	92	84	89	81	81	88	89	84	90	86	90	92	91	93	96	93	78	84	80	76	83	87	90	79	71	87	87.1
	Minimum	68	68	56	66	67	64	65	67	68	56	53	56	57	62	66	66	69	50	53	56	61	66	62	54	47	47	50	65	59	50	58	59.7
Bardstown §§	Maximum	98	93	95	97	98	98	87	92	88	85	90	90	85	90	88	88	94	92	94	98	91	73	84	82	79	86	87	90	88	72	84	88.9
	Minimum	69	71	57	63	63	64	63	69	65	55	63	56	63	65	67	65	62	55	56	56	67	68	62	56	51	46	52	62	63	64	60	61.2
Bowling Green §§	Maximum	99	92	98	93	95	92	90	92	87	82	87	85	87	92	85	85	90	86	85	89	90	88	..	..	83	86	88	90	88	71	86	b88.3
	Minimum	71	71	61	61	65	65	66	69	69	59	58	56	67	67	72	70	65	65	62	60	64	68	66	68	56	49	54	59	60	63	63	63.5
Edmonton	Maximum	94	90	91	91	91	88	85	86	88	85	84	86	84	82	83	79	83	85	87	84	83	85	81	82	75	84	82	85	80	81	79	84.6
	Minimum	62	63	57	62	62	62	65	62	75	51	55	65	64	64	65	64	60	59	56	63	61	68	53	63	52	67	63	65	60	60	59	61.6
Eubank §§	Maximum	93	88	87	93	90	90	80	87	..	87	86	86	80	85	85	89	87	87	88	89	90	82	80	78	75	81	84	85	86	80	78	a85.2
	Minimum	69	70	58	59	63	61	62	65	62	..	50	54	57	66	67	64	69	54	57	60	64	67	62	55	50	44	51	56	64	64	64	a60.3
Frankfort	Maximum	95	89	89	93	93	91	87	86	84	81	84	88	84	86	84	88	88	85	89	91	91	79	82	80	78	80	85	87	85	76	80	85.7
	Minimum	70	72	59	64	65	66	64	68	62	58	57	57	68	67	67	64	63	51	55	58	61	67	62	60	60	61	54	64	62	60	60	62.2
Franklin	Maximum	93	88	87	89	89	86	87	83	83	76	79	84	82	83	80	79	85	84	84	86	87	80	82	80	74	77	85	87	84	71	80	83.0
	Minimum	72	71	62	67	66	67	67	68	69	60	59	60	66	67	70	70	64	65	61	63	69	68	66	59	57	51	58	61	66	62	63	64.4
Greensburg §§	Maximum	97	91	92	93	94	91	84	85	87	80	83	85	79	84	81	79	87	85	87	88	87	82	80	81	74	79	85	87	85	76	79	84.7
	Minimum	69	70	56	60	61	61	65	67	66	58	56	57	67	65	69	69	63	58	57	60	66	67	64	57	52	45	51	61	62	62	62	61.4
Irvington	Maximum	95	87	90	93	93	90	89	87	83	79	85	86	81	85	84	83	79	86	89	91	90	85	83	80	75	80	85	88	80	69	81	84.9
	Minimum	74	72	62	67	67	74	68	67	65	60	58	60	65	67	68	70	62	61	57	62	65	69	68	60	57	51	56	64	65	61	61	64.0
Junction City	Maximum	96	93	90	92	92	91	85	86	86	81	86	86	80	86	85	83	90	87	88	90	89	76	82	81	77	81	85	86	86	86	87	86.1
	Minimum	69	71	56	59	60	60	61	67	60	54	53	54	66	65	68	64	61	54	53	57	62	65	61	61	55	42	42	63	63	65	64	59.8
Leitchfield	Maximum	94	88	93	93	94	91	86	87	85	79	84	85	84	88	84	82	88	84	88	89	88	83	84	80	74	81	84	87	85	72	82	85.4
	Minimum	71	70	60	64	64	65	67	68	66	58	57	57	63	67	69	68	53	61	60	58	66	63	67	60	55	48	52	61	61	61	60	61.9
Lexington	Maximum	92	85	88	90	91	90	80	83	80	78	84	85	76	84	82	85	86	85	88	92	91	73	78	77	71	81	82	84	82	70	77	82.9
	Minimum	76	72	68	71	73	68	67	68	63	62	63	65	68	67	67	67	66	64	64	70	69	65	64	61	56	58	62	68	64	63	63	65.9
Loretto	Maximum	97	94	94	93	94	93	92	89	88	80	85	86	84	89	84	84	92	90	90	91	92	77	81	82	78	84	89	89	87	73	83	87.2
	Minimum	70	71	57	61	63	64	64	68	64	55	54	55	67	63	68	65	62	55	55	56	62	66	60	58	53	45	50	63	63	63	60	60.6
Louisville	Maximum	95	87	91	93	93	90	83	85	80	78	85	85	81	88	84	89	88	88	93	92	90	77	84	79	74	81	85	89	80	71	79	85.1
	Minimum	76	73	68	71	72	72	68	69	66	62	61	64	67	69	69	68	69	62	64	67	67	67	66	62	58	55	59	68	62	60	61	65.9
Do (Cherokee Park)	Maximum	93	89	87	90	91	89	84	84	82	77	82	84	80	85	82	85	86	84	89	91	87	75	82	79	75	79	84	86	78	70	79	83.5
	Minimum	73	71	60	65	65	68	64	67	63	59	58	58	64	65	67	66	64	57	56	59	62	67	65	58	55	50	53	63	61	59	59	62.0
St. John §§	Maximum	95	88	91	94	92	89	84	88	85	82	85	84	82	86	85	83	90	88	91	92	87	79	85	84	75	81	85	88	85	70	80	85.6
	Minimum	69	69	69	63	63	64	65	67	65	56	68	56	61	66	68	69	61	57	53	51	62	67	61	51	53	42	52	67	62	63	59	61.3
Scott	Maximum	94	88	91	93	94	91	81	87	75	79	83	85	84	88	86	88	86	88	93	92	92	75	83	80	75	84	85	88	79	70	80	85.1
	Minimum	72	72	59	65	63	68	66	69	59	57	59	60	66	65	67	60	65	53	55	61	62	67	65	59	53	52	54	67	62	58	60	61.9
Shelbyville §§	Maximum	96	90	93	95	96	93	85	88	81	82	87	89	83	89	86	91	93	91	94	97	93	77	83	80	76	84	87	89	82	70	83	87.2
	Minimum	70	71	58	61	65	66	64	69	61	58	57	58	58	65	68	63	60	54	57	57	63	66	61	57	53	48	49	59	59	60	59	60.5
Taylorsville	Maximum	95	86	89	92	92	88	85	87	81	81	85	86	82	86	83	86	88	85	88	91	87	72	83	80	72	77	83	86	80	69	80	84.0
	Minimum	69	72	58	63	63	66	62	70	63	57	57	55	63	64	69	64	58	52	53	54	60	65	63	59	53	47	52	56	60	62	59	60.3
Williamstown §§	Maximum	95	90	94	95	96	92	81	87	80	81	85	86	84	90	84	92	89	91	95	97	94	77	81	80	75	86	86	89	80	69	80	86.6
	Minimum	74	70	64	70	71	69	67	68	60	59	61	62	67	67	67	65	65	57	60	65	66	67	63	57	59	53	60	61	64	59	59	63.7
Eastern Division.																																	
Beattyville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	68	70	60	76	63	64	61	65	65	55	60	56	64	67	68	64	62	53	54	60	64	66	65	61	53	46	50	58	60	65	64	61.5
Berea	Maximum	94	89	87	91	91	91	84	87	79	80	87	89	81	89	82	88	88	89	90	93	92	76	80	80	80	83	85	86	79	80	84	85.6
	Minimum	63	73	56	61	53	63	62	64	52	53	54	56	63	67	64	69	66	68	53	69	64	64	63	60	52	45	64	66	64	64	64	61.3
Farmers	Maximum	95	90	90	90	92	93	90	87	83	84	87	88	85	89	85	91	95	92	95	96	95	80	86	80	75	85	90	90	88	77	84	88.0
	Minimum	67	68	55	58	60	60	60	66	61	55	60	53	62	66	68	64	57	48	50	55	57	63	65	58	48	45	45	60	61	63	61	58.7
Maysville §§	Maximum	98	90	91	94	98	96	87	89	81	81	84	90	85	90	90	91	90	88	94	96	95	75	84	82	72	81	90	90	85	72	82	87.5
	Minimum	70	72	57	61	63	67	65	67	61	55	60	57	64	66	68	63	62	52	55	58	60	64	64	62	52	46	52	51	64	64	62	60.8
Middlesboro	Maximum	90	86	85	85	87	85	80	81	81	77	80	83	81	83	78	78	83	81	85	85	85	85	83	79	75	77	82	85	84	80	77	82.1
	Minimum	70	70	66	59	61	60	66	67	67	57	58	57	69	66	67	63	65	61	59	62	66	68	67	61	54	49	51	58	61	65	65	62.4
Mount Sterling §§	Maximum	94	88	88	91	93	93	83	87	83	80	86	90	84	89	84	87	89	85	91	93	93	73	80	81	74	82	86	88	86	76	78	85.6
	Minimum	72	73	58	61	63	65	62	69	62	52	54	52	64	66	68	63	61	51	55	58	61	67	63	59	54	46	50	64	64	64	63	60.8
Richmond §§	Maximum	95	85	85	93	92	90	77	85	80	80	86	87	81	86	81	80	83	88	92	93	88	70	76	80	70	77	81	84	83	76	75	83.2
	Minimum	75	74	61	65	67	67	66	67	66	57	62	59	69	68	68	66	64	58	59	65	67	68	64	60	56	50	55	68	68	65	66	64.2
Weeksbury	Maximum	92	90	89	90	87	86	83	80	79	77	81	85	85	88	81	82	85	83	90	89	88	84	85	82	88	83	88	88	85	82	82	85.1
	Minimum	67	66	70	68	63	63	58	50	53	50	45	55	55	56	67	57	53	43	46	53	54	55	57	57	56	47	53	58	60	56	55	56.3
Williamsburg §§	Maximum	94	88	88	88	90	89	84	86	86	80	86	87	86	87	83	87	87	87	90	89	88	81	84	81	84	81	88	88	92	86	78	86.2
	Minimum	70	71	65	61	62	60	64	68	66	58	58	61	58	68	67	69	66	64	61	61	63	66	69	61	56	50	49	54	63	67	66	62.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
0.5 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

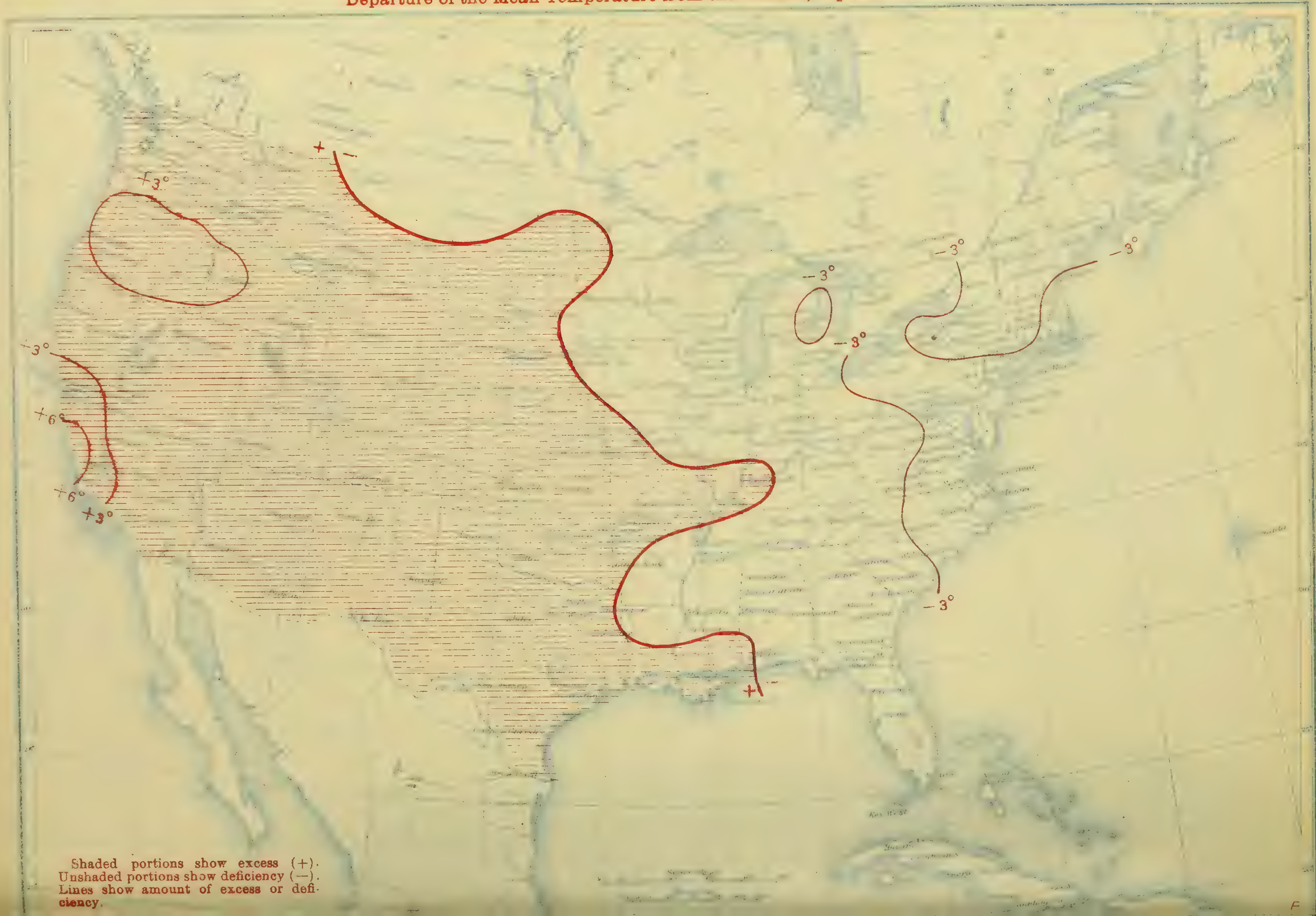
KENTUCKY SECTION

SEPTEMBER, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 24, 1917

Departure of the Mean Temperature from the Normal, September, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXII. LOUISVILLE, KY., SEPTEMBER, 1917. No. 9

GENERAL SUMMARY.

During the first decade temperatures were seasonable, the rainfall was sufficient, and crops made good progress toward maturity. A decided change to colder occurred on the 10th culminating in light frost in many localities on the 11th and 12th. No damage of consequence was caused by these frosts. Most nights were abnormally cool after the 10th, and maximum temperatures were also generally low. The retarding effect of the low temperatures on the maturing crops was offset to some extent by the abundant sunshine; however, there was considerable late corn that had not ripened by the close of the month.

Most of the rainfall occurred in the period 7-8th, except in the eastern counties where there were good rains on the 27-28th. The abundant sunshine and comparatively light rainfall during the last three weeks were particularly favorable for cutting and housing tobacco; and the harvesting of this crop neared completion during this period. Plowing and seeding for fall grain progressed rapidly, but was somewhat hindered by the dryness of the soil toward the end of the month. The rainfall was not sufficient to keep pastures in good condition and they became short during the last two weeks. There was considerable local damage from heavy rains and windstorms in the valleys of the Licking and upper Kentucky rivers on the 7-8th; and tobacco was damaged by hail in some of the northern counties during the same period.

PRESSURE.

Only a few shallow areas of low pressure passed over or near this State during the month, that of the 7-8th being the best developed. Strong high pressure areas were dominant over this section from the 1st to 6th, and practically all the time from the 9th to 26th. The high area of the 9th-14th, which caused the abnormally low temperatures on the 11th and 12th, was unusually well developed for the time of year.

The mean sea-level pressure, based on the reports of two stations, was 30.12 inches. The extremes were 30.39 inches on the 11th at Louisville, and 29.77 inches on the 29th at Lexington.

TEMPERATURE.

The average temperature for the State, based on the records of 39 stations, was 67.7°, or 2.9° below normal. It is noteworthy that the average temperature for every month of the past growing season has been below normal. During the first week maximum temperatures were moderately high and mean temperatures generally above normal. During the remainder of the month minimum temperatures ranged generally from 40° to 55° on most days; while on the 11th and 12th they ranged from 34° to 44° at most stations. This cool period was broken only by the moderately high maxima of the 15th and 16th. The extremes were 98° at Paducah on the 5th and 6th, and 34° at Loretto on the 30th.

PRECIPITATION.

The average precipitation, determined from the record of 53 stations, was 2.56 inches, which is 0.14 inches below normal. In general the total rainfall of the month increased from less than one-half inch in the extreme western counties to more than five inches in the extreme northeastern counties. In that part of the State west of the lower Cumberland River monthly amounts were less than one inch, and they were less than two inches over large areas in the Salt River basin. In the northeastern counties amounts ranged between 4.0 and 5.5 inches.

Rains were general over the State on the 7-8th, and there were moderate to heavy rains over central and eastern counties on the 27-28th. Light showers occurred during the first week and also in the period 20th-21st. Amounts at the various stations ranged between 0.45 inch at Mayfield and 5.52 inches at Catlettsburg. Some heavy 24-hour rainfalls were: 3.10 inches at Burnside on the 28th, and 4.00 at Falmouth on the 8th.

WIND.

The total wind movement at Louisville was 6,499 miles, and at Lexington 7,681 miles, with average hourly velocities of 9.0 and 10.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 58 miles from the southeast on the 7th, and at Lexington 40 miles from the southwest on the same date. This is the highest wind velocity on record for Louisville for September.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 81 per cent, at 2 p. m. 45 per cent, and at 7 p. m. 58 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 78 and at Lexington 62.

MISCELLANEOUS.

September 3.—Tobacco in the vicinity of Owensboro was damaged by hail; several barns were wrecked by wind, also a barn was destroyed and 2 mules were killed by lightning.

September 7.—Considerable damage was caused at Louisville by a heavy wind and rainstorm. Basements and streets were flooded, and crops in the vicinity damaged.

September 8.—Much damage was caused in creek bottoms from heavy rains in the Licking River basin. A church at Irvington and a barn at Clinton were burned by lightning. Extensive damage was caused to tobacco near Owensboro.

September 21.—Tobacco was damaged by hail in Nicholas County.

Rivers:—Except for the local tides in the upper Kentucky and in the Licking, low stages prevailed in the streams of the State, including the Ohio, during the month.

COMPARATIVE DATA FOR SEPTEMBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	72.1	−1.5	101	36	1.23	−1.47	
1890	67.0	−3.6	95	36	2.71	+0.01	
1891	69.5	−1.1	97	42	1.89	−0.81	
1892	68.5	−2.1	93	38	2.68	−0.02	
1893	69.6	−1.0	99	35	3.24	+0.54	
1894	71.7	+1.1	98	37	2.71	+0.01	
1895	73.4	+2.8	101	27	1.10	−1.60	3
1896	68.6	−2.0	100	30	3.77	+1.07	7
1897	72.8	+2.2	105	31	0.21	−2.49	1
1898	73.4	+2.8	103	42	4.36	+1.66	9
1899	68.7	−1.9	105	27	1.66	−1.04	5
1900	74.6	+4.0	102	35	2.25	−0.45	6
1901	68.1	−2.5	98	33	3.57	+0.87	6
1902	67.3	−3.3	97	29	4.01	+1.31	10
1903	69.1	−1.5	100	32	0.91	−1.79	4
1904	71.1	+0.5	99	34	2.58	−0.12	8
1905	70.2	−0.4	95	36	2.61	−0.09	6
1906	73.0	+2.4	95	45	6.15	+3.45	13
1907	69.1	−1.5	102	35	3.00	+0.30	6
1908	71.6	+1.0	101	30	1.03	−1.67	3
1909	67.7	−2.9	97	32	2.51	−0.19	6
1910	71.8	+1.2	99	38	4.41	+1.71	9
1911	74.3	+3.7	99	46	3.71	+1.01	10
1912	71.0	+0.4	103	33	2.80	+0.10	7
1913	69.6	−1.0	106	29	2.49	−0.21	9
1914	67.8	−2.8	97	36	2.96	+0.26	6
1915	70.7	+0.1	99	32	3.32	+0.62	7
1916	67.2	−3.4	98	32	3.48	+0.78	6
1917	67.7	−2.9	98	34	2.56	−0.14	5

Climatological data for September, 1917.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	14	67.0	-3.6	88	1†	38	12	41	1.20	-1.32	0.70	0	2	17	7	6	s.	Mrs. Della M. Davis.
Blandville	Ballard	445	35	69.0	-2.0	88	2	41	11	29	0.78	-2.20	0.69	0	2	11	14	5	se.	E. W. Horr.
Calhoun	McLean	437	13	69.9	-2.3	93	6	39	12	41	0.89	-1.71	0.72	0	3	17	13	0	e.	W. A. Taylor.
Earlington	Hopkins	420	26	70.8	+0.3	97	1	39	12	47	1.47	-1.58	0.52	0	6	24	0	6	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	69.1	...	91	1	39	12	39	1.52	...	0.48	0	4	16	14	0	w.	C. R. Lovell.
Hopkinsville	Christian	524	20	69.6	-2.3	90	16	43	12	35	1.33	-1.70	0.80	0	5	14	1	15	w.	W. F. Randle.
Marion	Crittenden	571	18	...	...	94	3	...	...	...	2.42	-0.62	1.44	0	3	19	6	5	...	B. C. Paris.
Mayfield	Graves	364	7	70.0	-1.1	92	1†	38	12	46	0.45	-2.38	0.25	0	3	6	16	8	s.	J. N. Davis.
Owensboro	Daviess	479	20	68.6	-2.1	90	2	46	11†	29	2.67	-0.15	1.75	0	4	18	11	4	se.	Henry S. Berry.
Paducah	McCracken	341	17	72.8	-1.2	98	5†	42	11	42	0.70	-2.29	0.32	0	4	24	0	6	n.	E. Futrell, Jr.
Princeton	Caldwell	529	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Russellville	Logan	590	5	69.3	...	93	7	40	12	41	0.60	-2.48	0.59	0	2	21	4	5	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	66.1	-4.6	83	6	42	12	28	3.45	+0.29	2.95	0	3	11	8	11	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	66.6	-2.5	91	2	36	30	41	1.62	-1.19	1.11	0	4	24	4	2	sw.	C. E. Barret.
Bardstown	Nelson	637	20	69.0	-2.9	92	2	38	12	45	2.02	-0.88	1.08	0	6	13	8	9	e.	Chas. M. Talbott.
Bowling Green	Warren	500	26	71.0	1.0	94	6	42	11	41	2.09	-1.04	0.60	0	6	18	11	1	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	...	...	...	...	...	...	...	...	2.53	...	1.12	0	8	...	...	...	...	James H. Young.
Burnside	Pulaski	773	24	...	...	...	...	...	...	...	3.81	+0.55	3.10	0	4	...	...	...	...	C. L. Hurt.
Carrollton	Carroll	...	...	...	...	...	...	...	...	...	3.16	+0.33	0.97	0	7	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	3	...	...	...	...	...	...	...	2.64	...	1.09	0	7	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	23	68.0	-1.7	89	16	39	12	38	2.32	-1.03	1.35	0	5	22	5	3	w.	P. W. Ray.
Eubank	Pulaski	1177	22	66.4	-2.3	89	2	38	12	39	2.78	-0.74	2.17	0	6	13	8	9	...	Mrs. Katie Payne.
Frankfort	Franklin	560	24	64.8	-3.8	89	2†	40	12	36	1.27	-1.57	0.48	0	5	20	4	6	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	J. E. Newman.
Greensburg	Green	581	24	66.4	3.6	87	2†	38	12	36	2.81	-0.16	1.07	0	7	3	13	14	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	...	...	...	...	...	...	...	2.48	-0.40	0.96	0	6	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	19	68.2	-2.2	89	6	43	11	33	1.79	-1.20	0.70	0	5	22	4	4	sw.	W. J. Piggott.
Junction City	Boyle	1087	23	66.6	-3.0	89	1	36	12	42	2.73	-0.29	1.40	0	6	20	8	2	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	67.4	-2.4	88	3†	42	11†	35	2.50	-1.14	0.94	0	5	20	8	2	ne.	John E. Stone.
Lexington	Fayette	989	29	67.2	-0.7	86	1	42	11	25	2.46	+0.04	1.45	0	5	17	7	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	67.9	-2.3	93	6	34	30	43	1.85	-1.02	0.80	0	4	16	10	4	...	Loretto Academy.
LOUISVILLE	Jefferson	525	44	68.8	-1.1	90	2	44	11	31	2.27	-0.36	1.82	0	7	18	7	5	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	7	66.4	...	86	1†	42	11†	34	2.82	...	1.46	0	5	19	5	6	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	67.4	-1.7	90	3†	41	11†	37	2.33	-0.79	0.92	0	6	23	5	2	...	Sisters of Loretto.
Scott	Kenton	900	19	65.8	-3.7	90	2	39	11	38	4.19	+1.64	2.18	0	8	16	9	5	n.	E. B. Wilson.
Shelbyville	Shelby	825	28	68.0	-1.5	90[b]	2	39	12	40[b]*	1.34	-1.55	0.55	0	5	15	11	4	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	65.6	2.6	87	2†	38	12	38	2.65	-0.80	1.20	0	5	18	5	7	ne.	E. D. Bourne.
Williamstown	Grant	943	14	67.6	-0.8	91	2	39	11	37	1.43	-1.66	0.56	0	6	21	5	4	...	Miss Rose Carter.
Woodbury	Butler	390	...	...	...	...	...	...	...	...	2.33	...	1.18	0	7	...	...	...	...	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	66.8	3.2	88	26	36b	30	41[b]	5.17	+2.12	2.93	0	7	17	5	8	s.	A. H. Bowman.
Berea	Madison	1070	15	66.0	-3.3	88	3	36	12	39	1.86	0.80	1.65	0	2	25	4	1	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	...	...	...	...	...	...	...	5.52	+1.87	2.05	0	6	...	...	...	...	Forester Farley.
Falmouth	Pendleton	600	28	...	...	...	...	...	...	...	4.46	+2.49	4.00	0	5	19	7	4	...	J. V. Oldham.
Farmers	Rowan	668	9	[a]65.8	-2.7	89	1†	37[a]	11	45[a]	4.23	+1.14	1.95	0	4	24	2	4	w.	Durwood Cassity.
Hazard	Perry	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	Breathitt	776	5	...	...	...	...	...	...	...	4.05	...	2.70	0	5	...	...	...	...	Jas. L. McCoy.
London	Laurel	1190	2	...	...	...	...	...	...	...	2.88	...	2.50	0	6	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	13	...	...	...	...	...	...	...	4.35	+1.83	1.30	0	6	...	...	...	...	Miss Carrie S. Adams.
Manchester	Clay	1400	7	...	...	...	...	...	...	...	2.04	...	0.92	0	4	...	...	...	...	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	65.8	-3.8	93	2	38	11	40	4.38	+1.75	2.55	0	7	22	3	5	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	67.1	-1.7	87	8	41	11	33	1.85	-0.90	1.25	0	6	18	11	1	...	B. H. Perkins.
Mount Sterling	Montgomery	930	27	65.6	-2.0	89	6	38	12	36	3.52	+0.63	1.44	0	5	18	3	9	se.	W. R. McKee.
Pikeville	Pike	634	11	...	...	...	...	...	...	...	4.30	+1.43	2.30	0	5	...	...	...	...	I. M. Williams.
Richmond	Madison	926	23	67.2	3.4	89	15	40	11	33	3.14	+0.50	2.90	0	7	17	6	7	s.	J. W. Crooke.
Weeksbury	Floyd	1216	3	66.6	...	90	2	42	11†	39	2.93	...	1.64	0	5	18	6	6	...	O. A. Lund.
Williamsburg	Whitley	939	19	67.8	-2.8	89	6	39	11	36	3.08	-0.28	2.00	0	6	15	9	6	s.	N. C. Jones.
State averages and extremes		...	...	67.7	...	98	5†	34	30	47	2.56	...	4.00	0	5	18	7	5	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post office address, Normal, Ky.; ‡‡ Nerinx, Ky.

Daily Precipitation for September, 1917.

Stations		Day of month.																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division																																	
Beaver Dam‖	G				.50				.70													T											1.20
Blandville	M								.69								.09			T								T					0.78
alhoun	G	T	T	.10			T	T	.72											T.	.07	T						T					0.89
Darlington‖	G			.19	.52			.06	.49												.01	.20											1.47
Greenville	G		.30	.29			.45		.48																								1.52
Hopkinsville‖	C				.40		.05	.10	.75									.08															1.38
Marion	O		.28	.70					1.44																								2.42
Mayfield‡‖	M								.25									.10			.10												0.45
Owensboro‡‖	O				.40			1.75	.50												T	.02	T						T				2.67
Paducah	O		.03	.20					.32												T	.15											0.70
Princeton	G																																
Russellville‖	G								.59									.01															0.60
Central Division.																																	
lpha	C		.25																			.25						2.95					3.45
nchorage	O			.28			T	1.11	T.												.15	T.						.08					1.62
ardstown‖	S							.25	1.08												.15	.04	.10						.40				2.02
owling Green‡‖	G	.50		T.	.22			.37	.60													.05						T	.35				2.09
rownsville	G	.06	.17	.14	.72				1.12												.03							.03	.26				2.53
urnside‖	C	.35						T.	T.													T.	.30					.06	3.10				3.81
arrollton‖	O						.68	.97	.42												.66	.12	.03						.28				3.16
loverport‖	O			.80	.10			.39	1.09												.01	.10							.15				2.64
dmonton	G			.05					.60													.17						1.35	.15				2.32
ubank	C	.13		.19				.13	.09													.07							2.17				2.78
rankfort	K							.35	.48	.18												.06	T						.20				1.27
ranklin	G																																....
reensburg‖	G	.01			.33			.13	.75	.47												.05						T.	1.07				2.81
igh Bridge‖	K	.10						.60	.56													.17	.09						.96				2.48
vington	O			.22				.42	.38												.07	.70											1.79
unction City	K		.09					.39	.53	.30												.02						1.40					2.73
eitchfield	G		.07	.94			T.	.15	.85												T.	T.						.49					2.50
exington ***	K		T.	T.			.08	1.28	.18												.16							.76					2.46
oretto	S			T				.80	.40	T.											T	.20						.45					1.85
ouisville***	O			.11	T.		.05	1.78	.10												.19	.02						.02					2.27
Do. (Cherokee Park)	O			.10				.82	1.46							T.					.37							.07					2.82
. John‖	S	.03			.92			.52	.75												.06	T.	T						.05				2.33
cott	L			.08			1.44	.01	2.18							.07					.26							.02	.13				4.19
helbyville	S							.16	.55	.11											T		.07						.45				1.34
aylorsville	S			T.				.59	1.20												.10	.63						.13	T				2.65
illiamstown	L							.22	.56	.04												.15	.02						.44				1.43
oodbury	G	.04		1.18	.13				.69												.05	.06							.18				2.33
Eastern Division.																																	
eattyville	K	.15						1.41	.10	.03	.05											.50							2.93				5.17
erea	K		T.						.21																			1.65					1.86
atlettsburg	B							1.13	2.05	1.12							.15					.12							.95				5.52
almouth	L								4.00	.02												.03	.14						.27				4.46
armers	L							.30	1.95																			1.68	.30				4.23
azard‡‖	K																																....
ckson	K					.05		.40	.57		T											.33							2.70				4.05
ondon‡‖	C	.09	.05	.07																			.15					.02	2.50				2.88
ouisa	B	.02						.97	1.30	.55												.31							1.20				4.35
anchester	K	.27							.78																			.07	.92				2.04
aysville‡‖	O	.20						.20	2.55	.01												.05	.67						.70				4.38
iddlesboro	C	.18		.06	.07												.03											1.25	.26				1.85
ount Sterling‡‖	L	.36		T	.20			.19	1.33		T.											T.							1.44				3.52
ikeville‡‖	B	.35			.10			.65	.90																				2.30				4.30
ichmond‡‖	K	.26		.25	.15			.30	.15													.03							2.00				3.14
eeksbury	B				.02				1.00	.25	.02																	1.64					2.93
illiamsburg‡‖	C	.17		.76							.05												.05					.05	2.00				3.08

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖: Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

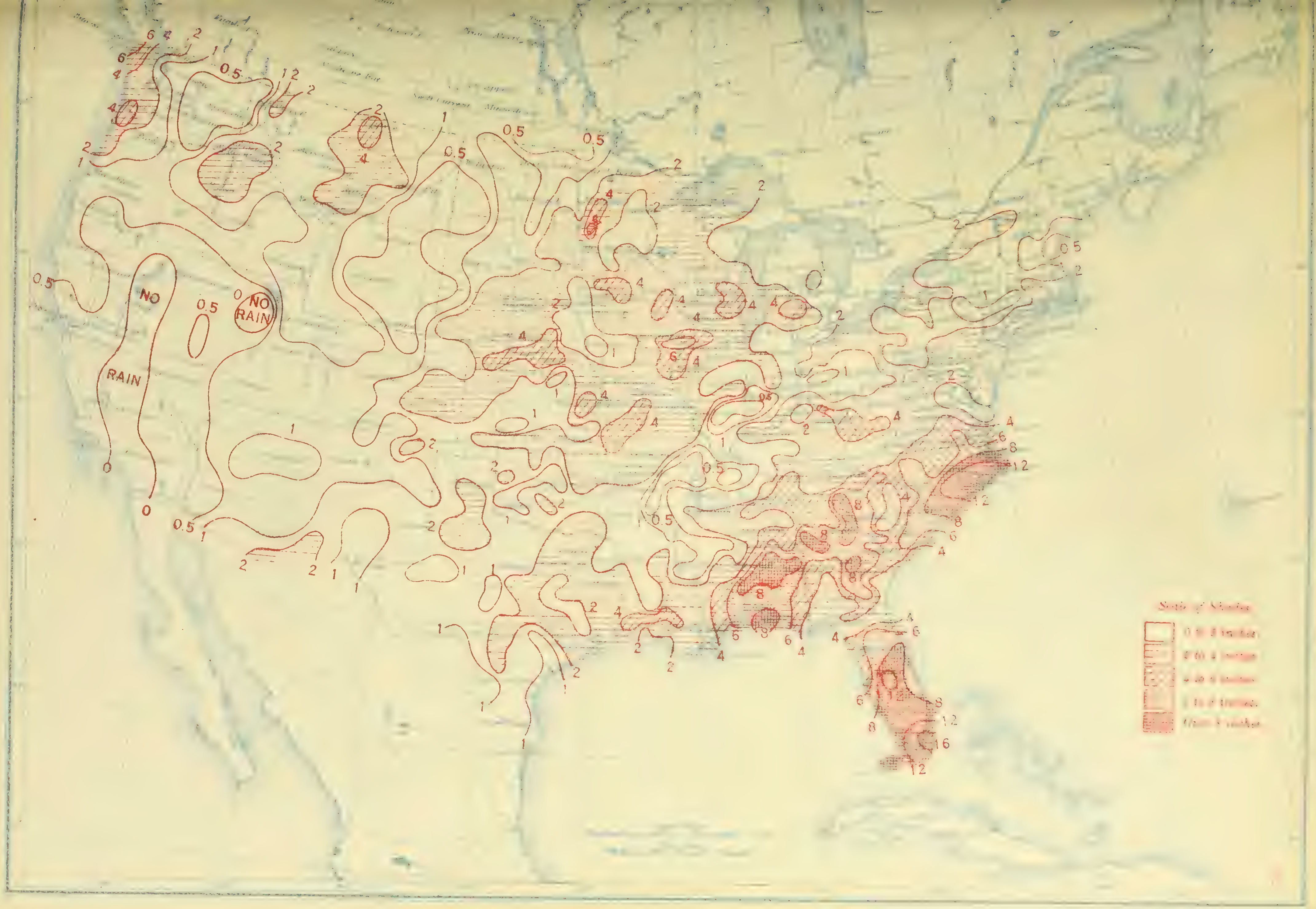
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for September, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	88	86	88	82	88	88	87	84	80	66	66	74	79	83	86	84	81	80	87	80	76	77	81	81	84	85	79	74	81	71	..	80.9
	Minimum	61	66	65	62	60	60	63	66	68	59	40	38	39	44	45	54	55	52	51	53	56	56	45	50	48	50	60	44	44	42	..	53.2
Blandville	Maximum	82	88	87	83	86	86	87	82	78	66	66	74	78	81	85	86	81	82	80	80	70	75	78	78	78	76	76	72	80	74	..	79.2
	Minimum	68	68	66	63	61	66	69	69	66	55	41	46	55	54	62	64	58	63	63	64	56	60	52	58	56	59	56	47	51	45	..	58.7
Calhoun	Maximum	91	90	92	87	91	93	91	89	84	72	69	80	84	87	89	87	84	84	88	84	77	77	82	84	85	84	81	72	85	78	..	84.0
	Minimum	62	65	63	61	59	61	68	66	66	59	42	39	48	48	56	64	57	55	55	64	55	55	52	54	52	54	60	45	46	44	..	55.8
Earlington §§	Maximum	97	93	94	89	93	94	93	89	83	68	73	82	87	91	94	84	84	90	90	85	77	81	85	85	85	88	85	80	88	77	..	86.1
	Minimum	62	66	64	64	60	62	64	68	68	62	42	39	40	48	51	57	53	53	55	60	56	59	48	53	52	55	61	55	46	43	..	55.5
Greenville	Maximum	91	89	89	85	89	89	88	87	81	75	67	78	82	84	87	87	80	82	85	81	77	77	80	80	82	85	78	75	83	74	..	82.2
	Minimum	62	65	63	62	61	61	68	67	67	59	42	39	48	47	55	62	58	53	55	61	57	58	50	53	51	54	63	48	45	47	..	56.0
Hopkinsville §§	Maximum	88	83	89	87	89	87	89	85	81	66	69	76	79	85	87	90	81	84	82	80	78	75	83	81	81	81	75	75	81	74	..	81.5
	Minimum	63	67	65	65	63	63	63	68	69	60	44	43	62	50	57	59	59	57	57	57	59	58	51	51	53	54	65	48	49	48	..	57.6
Marion	Maximum	93	93	94	82	88	87	89	89	86	72	68	76	80	84	89	90	82	84	83	83	74	87	80	85	80	82	77	76	85	75	..	83.1
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mayfield §§	Maximum	92	90	92	89	92	92	90	85	86	66	76	80	82	86	91	90	84	84	84	85	78	77	81	82	84	81	79	87	87	88	..	84.5
	Minimum	59	67	63	59	58	59	68	68	59	65	41	38	53	47	48	62	57	57	59	63	53	58	49	50	51	63	59	44	43	42	..	55.4
Owensboro §§	Maximum	88	90	88	82	85	88	87	82	78	66	66	73	78	82	85	84	80	79	83	84	74	74	76	78	79	81	77	70	79	71	..	79.6
	Minimum	63	63	65	63	63	64	69	68	66	61	46	46	50	53	59	64	59	57	55	62	57	57	53	55	53	56	61	49	47	48	..	57.7
Paducah (Lone Oak)	Maximum	96	95	97	88	98	98	96	89	83	78	72	74	87	88	91	90	85	92	89	86	90	80	84	82	88	87	80	76	85	81	..	86.8
	Minimum	65	66	66	62	62	68	69	68	66	59	42	56	45	54	66	64	59	62	60	61	55	60	62	53	56	60	60	45	50	47	..	58.9
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	92	83	91	87	90	91	93	90	80	66	69	79	81	86	90	88	86	85	85	84	78	80	83	83	84	84	70	78	82	72	..	83.0
	Minimum	62	64	64	61	57	62	63	65	70	58	42	40	47	45	54	59	55	54	53	62	57	59	52	50	58	52	57	48	47	49	..	55.5
Central Division.																																	
Alpha	Maximum	80	81	80	79	80	83	82	79	80	71	62	70	74	76	80	86	75	72	78	78	70	70	70	71	75	73	64	66	70	62	..	74.4
	Minimum	64	66	66	62	63	64	68	67	71	60	44	42	48	54	59	60	56	50	52	65	62	60	52	50	52	54	63	60	53	48	..	57.8
Anchorage	Maximum	89	91	89	79	86	90	86	81	83	67	68	77	80	86	88	83	81	83	85	76	79	76	81	80	81	85	77	74	81	69	..	81.0
	Minimum	61	63	60	62	59	60	66	66	65	50	40	37	47	45	56	60	51	47	47	58	54	54	49	51	43	46	49	44	43	36	..	52.3
Bardstown §§	Maximum	91	92	90	88	89	91	86	84	83	68	71	81	85	90	91	85	86	86	90	80	80	84	86	84	87	86	66	75	83	73	..	83.7
	Minimum	61	65	63	61	57	61	69	66	68	59	41	38	46	45	59	54	55	47	47	52	57	55	47	51	45	48	56	59	45	55	..	54.4
Bowling Green §§	Maximum	92	88	93	91	92	94	92	89	86	83	73	81	84	89	91	92	86	87	85	86	83	81	85	84	86	85	65	78	85	85	..	85.7
	Minimum	63	63	68	64	62	62	63	67	67	59	42	43	50	50	53	59	59	54	54	56	59	57	50	55	51	53	57	52	51	44	..	56.2
Edmonton	Maximum	85	88	85	86	87	82	82	85	84	81	67	75	82	85	85	89	85	80	84	79	81	77	79	81	82	81	77	69	76	66	..	80.8
	Minimum	59	61	58	59	60	60	58	59	63	52	42	39	44	56	62	64	69	51	49	58	59	58	50	51	53	49	57	55	50	48	..	55.1
Eubank §§	Maximum	86	89	87	83	87	87	85	85	82	65	65	77	81	85	85	80	77	81	83	83	78	78	80	79	82	83	64	70	77	67	..	79.7
	Minimum	59	63	61	58	59	59	63	67	65	58	41	38	42	46	53	57	56	46	47	49	56	57	49	48	48	50	51	57	50	40	..	53.1
Frankfort	Maximum	86	89	86	83	82	89	84	80	80	76	65	73	79	82	89	81	77	79	80	77	74	74	78	77	77	80	73	70	76	68	..	78.8
	Minimum	61	64	64	63	57	62	66	68	66	57	42	40	46	46	56	59	56	48	48	56	55	56	50	49	44	46	56	54	46	46	..	50.9
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	86	87	86	83	84	83	87	82	81	66	65	73	78	82	87	84	81	80	83	83	78	75	79	77	81	80	65	70	76	67	..	79.0
	Minimum	59	64	64	61	58	60	63	65	67	59	48	38	45	46	54	57	55	48	47	54	59	58	47	49	47	49	55	49	49	43	..	53.7
Irvington	Maximum	88	88	88	82	84	89	87	82	80	72	65	72	77	81	85	83	80	78	83	77	76	73	76	76	77	80	73	70	78	70	..	79.0
	Minimum	65	66	65	62	61	67	70	67	67	58	43	44	51	52	57	65	55	55	56	65	59	56	51	56	53	53	62	48	45	45	..	57.3
Junction City	Maximum	89	87	86	85	86	88	84	84	80	75	67	77	81	85	87	82	80	81	84	82	80	78	79	80	82	82	69	70	78	68	..	80.5
	Minimum	63	59	62	63	56	63	67	66	68	56	38	36	42	43	57	58	52	44	44	54	59	47	47	45	43	47	53	56	46	45	.	52.6
Leitchfield	Maximum	86	87	88	82	83	88	86	83	80	75	65	73	75	82	84	82	82	80	82	79	76	74	79	78	80	79	70	72	78	71	..	79.3
	Minimum	61	65	64	62	60	63	69	65	68	58	42	42	48	47	60	63	47	51	49	60	58	57	50	51	49	53	60	50	48	47	..	55.5
Lexington	Maximum	86	84	83	79	81	85	81	77	76	63	62	73	80	82	82	76	75	79	82	77	74	71	75	74	76	80	67	68	75	64	..	76.2
	Minimum	65	68	64	64	56	67	65	67	63	48	42	49	56	57	64	60	55	57	66	62	61	55	50	55	56	57	60	55	58	47	..	58.1
Loretto	Maximum	91	91	91	86	87	93	91	84	83	75	69	78	82	86	90	86	83	84	85	84	80	78	82	80	84	86	80	72	79	70	..	83.0
	Minimum	60	63	61	62	56	61	67	65	68	58	41	36	45	43	55	58	54	45	45	62	58	50	46	48	42	50	50	55	46	34	..	52.8
Louisville	Maximum	87	90	88	81	83	88	84	77	80	65	67	75	78	85	87	82	80	82	83	75	76	74	78	79	80	79	69	71	80	68	..	79.0
	Minimum	65	71	67	66	60	70	66	68	63	50	44	48	53	54	62	64	58	54	56	64	59	57	51	58	56	55	59	52	53	51	..	58.5
Do. (Cherokee Park)	Maximum	86	85	84	79	82	86	82	80	78	75	65	73	75	81	83	80	78	78	79	76	73	72	74	75	76	78	74	67	75	73	..	77.4
	Minimum	62	66	63	63	56	64	67	67	65	56	42	42	47	47	57	61	55	51	50	63	59	57	49	53	49	49	60	50	47	48	..	55.5
St. John §§	Maximum	87	89	90	85	86	90	85	85	81	65	65	75	79	82	83	83	81	80	84	80	79	75	78	77	80	81	67	74	82	71	..	80.0
	Minimum	61	64	62	61	59	61	67	66	67	59	41	41	48	45	58	60	56	51	48	60	56	56	50	52	48	49	57	51	45	41	..	54.7
Scott	Maximum	87	90	86	74	83	86	76	73	79	70	66	73	77	83	84	76	74	79	79	72	74	71	75	76	78	82	74	71	78	70	..	77.2
	Minimum	64	69	64	60	53	62	69	62	63	53	39	40	48	50	60	59	54	52	52	57	55	51	47	57	45	44	59	48	48	45	..	54.3
Shelbyville §§	Maximum	90	89	87	83	86	89	84	81	83	68	69	78	78	87	89	85	82	84	87	76	75	78	81	79	..	85	..	74	82	70	..	[b]81.4
	Minimum	61	65	62	62	55	57	67	66	66	59	40	39	49	47	49	61	55	47	49	51	57	54	48	51	51	45	51	52	45	45	..	53.5
Taylorsville	Maximum	85	87	85	81	82	87	84	79	80	73	63	71	75	81	83	80	73	78	80	75	75	73	75	75	76	78	68	70	76	67	..	77.2
	Minimum	60	63	62	62	58	60	68	67	68	58	41	38	46	43	56	58	57	47	47	58	59	57	48	49	44	45	56	54	45	44	..	53.9
Williamstown §§	Maximum	88	91	88	83	84	81	82	80	80	69	70	77	83	81	90	85	81	83	85	77	76	79	81	83	83	87	68	76	83	68	.	80.7
	Minimum	63	67	63	63	54	56	63	63	65	55	39	45	46	54	57	60	53	55	56	56	59	50	47	53	50	51	54	49	50	42	..	54.6
Eastern Division.																																	
Beattyville §§	Maximum	82	85	83	85	82	82	80	78	81	69	68	79	81	62	87	80	79	85	87	85	80	77	79	81	81	88	81	74	80	69	..	79.7
	Minimum	65	64	63	63	63	55	62	68	68	57	40	..	..	40	56	56	52	48	46	49	57	53	48	48	46	48	51	56	51	36	..	[b]53.9
Berea	Maximum	87	87	88	82	84	87	86	85	80	70	70	75	82	80	76	76	76	80	83	82	76	73	79	76	74	78	64	70	77	68	..	78.4
	Minimum	67	64	63	62	62	66	66	68	66	52	38	36	47	46	46	47	56	48	47	52	54	57	50	46	43	45	59	67	48	43	..	53.7
Farmers	Maximum	89	84	86	88	81	89	80	80	84	65	70	79	83	80	86	86	80	85	85	78	73	79	84	85	84	85	68	77	79	70	.	80.7
	Minimum	60	60	60	61	50	54	64	66	65	55	37	..	40	42	55	55	51	47	42	48	55	50	44	42	39	42	49	57	47	40	..	[a]50.9
Maysville §§	Maximum	90	93	88	81	85	90	80	84	81	67	68	80	84	82	83	81	78	82	83	77	81	75	68	78	79	85	65	77	79	67	..	79.7
	Minimum	62	62	62	63	52	54	61	64	62	55	38	40	45	48	47	57	50	51	50	50	54	50	46	48	48	45	46	55	48	45	..	51.9
Middlesboro	Maximum	83	81	85	82	82	85	85	87	83	77	67	72	77	83	83	82	77	78	79	79	79	74	73	76	75	78	70	70	75	67	..	78.1
	Minimum	62	67	67	65	64	61	64	68	65	61	41	43	47	50	56	61	54	51	52	54	54	55	54	52	50	50	52	58	56	48	..	56.1
Mount Sterling §§	Maximum	82	88	85	83	83	89	85	82	80	63	63	73	79	81	83	75	75	78	82	82	82	73	75	75	77	82	71	70	75	65	..	77.9
	Minimum	60	59	63	63	55	57	67	67	62	57	39	38	44	47	53	61	55	49	46	52	60	53	51	48	46	49	53	56	47	43	..	53.3
Richmond §§	Maximum	84	83	84	80	80	84	80	82	79	61	61	76	80	85	89	72	80	80	81	77	75	73	80	77	81	82	66	68	68	68	..	77.2
	Minimum	64	68	65	63	57	64	66	67	68	58	40	43	50	53	62	63	55	53	53	60	62	59	51	53	51	56	61	57	51	46	..	57.3
Weeksbury	Maximum	88	90	87	80	82	89	87	85	80	71	65	73	83	82	72	79	76	78	81	83	79	71	70	77	76	60	69	70	77	75	..	78.2
	Minimum	54	56	57	56	59	50	67	65	69	56	42	42	15	51	57	62	52	49	49	53	56	67	66	48	48	50	52	58	56	54	..	54.9
Williamsburg §§	Maximum	88	87	87	87	85	89	89	88	84	64	69	76	80	85	87	83	81	81	82	83	79	77	78	80	80	81	64	78	77	75	..	80.8
	Minimum	63	64	63	64	63	61	63	68	61	58	39	41	47	49	51	55	53	50	50	53	53	56	52	50	50	44	53	57	58	41	..	54.7

§§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shading
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8
12
16

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

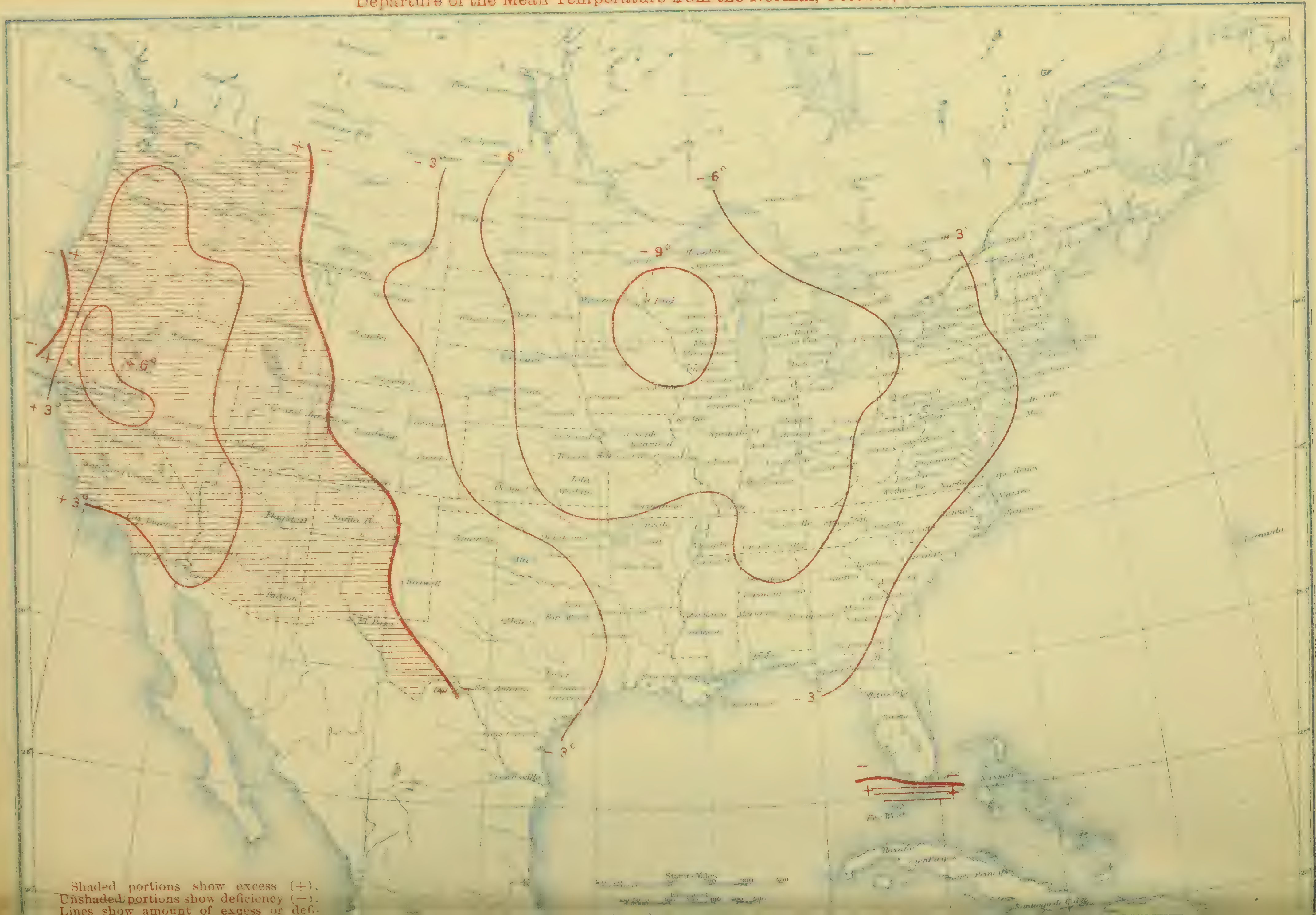
KENTUCKY SECTION

OCTOBER, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 21, 1917

Departure of the Mean Temperature from the Normal, October, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or defi-

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXII. Louisville, Ky., October, 1917. No. 10

GENERAL SUMMARY.

This month was the coldest October since State averages were established in 1889. Except for a few days near the middle of the month, temperature was almost continuously below normal. The abnormal conditions were especially marked in the case of the minimum temperature, which ranged from 25 to 40 degrees on most days. Killing frost occurred in the east-central counties on the 7th, and generally over the State on the 9th, causing considerable damage to late crops of corn, tobacco, tomatoes, and potatoes. The damage was due more to the cold and backward season which delayed the maturing of the crops, than to the fact that the frost was much earlier than usual. The remarkable character of the past growing season is well illustrated by the following: 1st, the average temperature of every month, April to October, inclusive, was below normal; 2d, May, the principal month of planting and germination, was so cold as to break all previous records for that month, and seriously delayed and stunted plant growth in its inception; 3d, October, like May, the coldest on record, brought frost and freezing weather unusually early, cutting short the period for the maturing of the belated crops.

Precipitation for the month averaged somewhat above normal for the State as a whole; but was generally deficient over western counties, the excess being over central and eastern counties. Dry weather, prevailing over the western counties during the last three weeks of September, continued in most of that district during the first half of October, and much of the grain sown in September and early in October in those counties did not germinate until after the rains of October 18-19th. The unseasonably low temperatures also retarded germination and growth of fall grains, which had made slow progress at the close of the month. Some tobacco was frozen in barns before it had time to cure.

PRESSURE.

Well developed high and low pressure areas with rapid movement dominated the month's weather, and allowed no opportunity for the development of those periods of settled weather so characteristic of October. Strong high pressure areas prevailed during the first two weeks. Several low pressure areas of great energy passed rapidly over or near the State during the last half of the month, bringing frequent rains and high winds.

The mean sea-level pressure, based on the records of two stations, was 30.09 inches. The extremes were 30.44 inches at Lexington on the 6th, and 29.59 inches at Lexington and Louisville on the 29th.

TEMPERATURE.

The average temperature for the State, determined from the reports of 40 stations, was 51.1°, which is 6.6° below normal. There was only one short period of warm weather, 15-18th, and but one or two other days when seasonable temperatures prevailed. During the first two weeks, minimum temperatures were in the 30's on most days, with temperatures of freezing or lower on the 7th and 9th; and during the last decade they ranged generally between 20° and 35°. The extremes were 90° at Bowling Green and Paducah on the 17th, and 20° at several stations in the eastern and central counties on the 24th and 31st.

PRECIPITATION.

The average precipitation, computed from the records of 51 stations, was 3.18 inches, which is 0.90 inch above normal for October. In general precipitation was light over the western counties, ranging between 1.2 and 3.0 inches; and moderately heavy over the central and eastern counties, ranging between 3.0 and 5.5 inches. Moderate rainfall occurred in the central and eastern counties on the 12th, and generally over the State on the 18-19th; also good showers were general during the last week. Amounts at the various stations ranged between 1.23 inches at Marion, and 5.54 inches at London. Heavy snow squalls occurred generally on the 23d.

WIND.

The total wind movement at Louisville was 9,801 miles, and at Lexington 10,537 miles, with average hourly velocities of 13.0 and 14.2 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 52 miles from the southwest on the 26th, and at Lexington 48 miles from the southwest on the 29th. The total wind movement and maximum velocity are the greatest on record for Louisville for October. Wind velocities in excess of 40 miles per hour occurred at Lexington on the 12th, 18th, 26th, and 29th, and at Louisville on the 11th, 26th, and 29th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 72 per cent, at 2 p. m. 49 per cent, and at 7 p. m. 54 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 62 and at Lexington 46.

MISCELLANEOUS.

October 2.—Brilliant prismatic solar halos of 22° and 46°, with parhelia and tangent arcs, were observed at Louisville and at other places in the western part of the State.

Rivers.—Stages were low during the first three weeks. A good rise started in the upper reaches of the Ohio on the 20th, producing good boating stages during the remainder of the month.

COMPARATIVE DATA FOR OCTOBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	52.0	-5.7	89	23	2.42	+0.14	
1890	55.7	-2.1	87	23	2.94	+0.66	
1891	54.8	-2.9	92	21	0.78	-1.50	
1892	57.3	-0.4	97	19	0.51	-1.77	
1893	56.4	-1.3	90	19	4.00	+1.72	
1894	58.6	+0.9	92	25	1.36	-0.92	5
1895	52.2	-5.5	89	14	1.24	-1.04	4
1896	55.8	-1.9	90	25	1.71	-0.57	5
1897	63.2	+5.5	96	26	1.10	-1.18	4
1898	57.1	-0.6	93	21	4.19	+1.96	10
1899	61.3	+3.6	93	26	2.42	+0.14	5
1900	64.5	+6.8	94	29	2.29	+0.01	5
1901	58.1	+0.4	93	25	1.57	-0.71	4
1902	60.1	+2.4	91	25	2.34	+0.06	5
1903	57.7	0.0	96	19	2.22	-0.06	5
1904	57.2	-0.5	93	20	0.52	-1.76	2
1905	57.0	-0.7	90	25	4.95	+2.67	9
1906	56.9	-0.8	91	20	1.51	-0.77	7
1907	55.5	-2.2	93	20	2.97	+0.69	6
1908	57.1	-0.6	92	20	0.71	-1.57	3
1909	55.2	-2.5	94	18	2.11	-0.17	6
1910	61.4	+3.7	96	17	4.45	+2.17	6
1911	59.9	+2.2	94	27	3.71	+1.43	10
1912	59.5	+1.8	92	25	1.42	-0.86	4
1913	56.9	-0.8	97	23	3.55	+1.27	9
1914	59.7	+2.0	91	22	5.10	+2.82	9
1915	60.6	+2.9	90	27	3.40	+1.12	6
1916	57.6	-0.1	97	24	2.59	+0.31	6
1917	51.1	-6.6	90	20	3.18	+0.90	7

Climatological data for October, 1917.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	14	49.3	− 8.1	88	17	24	13	48	2.37	−0.07	1.00	.....	4	12	4	15	s.	Mrs. Della M. Davis.
Blandville	Ballard	445	35	52.9	− 5.2	84	17	27	30	36	1.77	−0.96	0.83	T.	7	14	10	7	nw.	E. W. Horr.
Calhoun	McLean	437	13	52.7	− 6.6	87	17	24	13	47	2.77	−0.51	1.18	T	7	7	20	4	nw.	W. A. Taylor.
Earlington	Hopkins	420	26	52.6	− 6.4	89	17	25	13	46	2.56	+0.32	0.96	T.	6	18	2	11	s.	Brick Southworth.
Greenville	Muhlenburg	519	0	a52.6	.....	87[a]	17	25[a]	20	44[a]	3.13	.....	1.10	.....	4	9[a]	19[a]	2[a]	s.	C. R. Lovell.
Hopkinsville	Christian	524	20	54.2	− 6.2	86	16	27	13†	38	2.68	−0.19	0.93	.....	5	14	13	4	w.	W. F. Randle.
Marion	Crittenden	571	18	52.4	− 7.0	87	17	27	30	43	1.23	−1.31	0.79	T.	2	14	9	8	.....	B. C. Paris.
Mayfield	Graves	364	7	52.7	− 5.8	86	17	23	13	52	2.95	+0.40	1.50	.....	6	10	11	10	n.	J. N. Davis.
Owensboro	Daviess	479	20	51.0	− 8.0	86	17	26	13	41	3.28	+0.18	1.30	T.	8	12	10	9	se.	Henry S. Berry.
Paducah	McCracken	341	17	55.8	− 5.2	90	17†	28	30	51	2.20	−0.22	0.83	T	5	18	0	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russellville	Logan	590	5	52.0	.....	86	17	26	13†	49	2.88	.....	1.08	.....	6	17	7	7	w.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	51.8	− 7.7	79	17	29	13†	39	2.50	+0.07	1.35	T.	4	19	2	10	n.	W. W. Hicks.
Anchorage	Jefferson	700	16	48.8	− 7.7	83	17	23	30†	40	3.57	+0.71	1.39	0.6	7	19	7	5	nw.	C. E. Barret.
Bardstown	Nelson	637	20	50.2	9.3	88	17	20	24	47	2.05	−0.35	1.40	0.5	4	12	2	17	s.	Chas. M. Talbott.
Bowling Green	Warren	500	26	54.1	− 4.8	90	17	26	20	54	3.13	+0.76	1.30	0	5	18	9	4	n.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	.....	.....	.....	.....	.....	.....	.....	.....	2.87	.....	0.98	T.	7	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	24	.....	.....	.....	.....	.....	.....	.....	4.30	+2.00	2.35	T.	6	.....	.....	.....	.....	C. L. Hurt.
Carrollton	Carroll	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.20	+0.55	1.24	T.	8	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	3	.....	.....	.....	.....	.....	.....	.....	3.03	.....	1.13	T.	8	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	23	51.2	5.7	84[j]	17	24[j]	31	40[j]	.....	.....	.....	.....	.....	10[i]	7[i]	5	.....	P. W. Ray.
Eubank	Pulaski	1177	22	48.2	− 8.5	83	17	22	31	44	3.61	+1.47	1.33	T.	6	15	4	12	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	51.6	− 4.9	81	17	27	31	36	2.88	+0.93	0.92	T.	10	13	6	12	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Newman.
Greensburg	Green	581	24	49.4	− 7.1	83	17	21	24	42	3.15	+0.83	1.09	T.	7	9	11	11	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	.....	.....	.....	.....	.....	.....	.....	2.58	+0.11	0.73	T.	9	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	19	51.9	− 3.7	83	17	27	24	38	2.45	−0.30	0.78	T.	7	19	3	9	sw.	W. J. Piggott.
Junction City	Boyle	985	23	51.4	− 6.1	85	17	20	31	45	3.65	+1.66	1.10	1.0	10	19	8	4	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	51.1	− 7.0	84	17	25	20†	41	2.97	+0.54	1.14	T.	6	14	13	4	sw.	John E. Stone.
Lexington	Fayette	989	29	50.0	− 6.5	82	17	25	30	44	2.36	+0.14	0.71	0.2	11	9	11	11	se.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	51.5	− 6.8	86	18	22	31	45	3.42	+0.98	1.40	0.2	8	12	13	6	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	44	50.8	− 7.6	83	17	27	30	40	2.46	−0.17	0.63	T.	9	8	11	12	se.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do	534	7	50.8	.....	81	17	26	20	39	2.75	.....	0.88	T.	10	12	13	6	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	50.3	− 7.3	84	17	23	24	43	3.17	+0.68	1.45	T.	7	19	4	8	.....	Sisters of Loretto.
Scott	Kenton	900	19	49.9	− 7.9	81	17	27	31	37	3.49	+1.15	0.95	0.2	13	8	7	16	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	48.6	− 7.8	85	17	23	31	45	2.18	+0.05	0.78	1.0	10	16	8	7	w.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	49.4	6.6	81	17	24	31	42	2.91	+0.36	0.94	0.8	10	13	9	9	s.	E. D. Bourne.
Williamstown	Grant	943	14	49.4	− 7.6	85	17	25	31	44	.....	.....	0.95	T.	10	15	1	15	.....	Miss Rose Carter.
Woodbury	Butler	390	..	.....	.....	.....	.....	.....	.....	.....	2.95	.....	1.03	T.	7	.....	.....	.....	.....	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	50.1	− 6.4	89	18	20	31	49	3.99	+0.83	1.70	0.3	8	13	2	16	sw.	A. H. Bowman.
Berea	Madison	1070	15	51.2	7.3	86	18	22	31	46	4.74	+1.67	1.72	0.1	9	19	7	5	se.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	.....	.....	.....	.....	.....	.....	.....	4.28	+1.81	1.65	1.0	8	.....	.....	.....	.....	Forester Farley.
Falmouth	Pendleton	600	28	.....	.....	.....	.....	.....	.....	.....	2.82	+0.65	0.73	T.	9	13	9	9	se.	J. V. Oldham.
Farmers	Rowan	668	9	50.0	6.6	86	17†	20	31	51	4.29	+0.99	1.95	T.	7	19	3	9	w.	Durwood Cassity.
Hazard	Perry	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson	Breathitt	776	5	.....	.....	.....	.....	.....	.....	.....	4.20	.....	0.78	T.	5	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	2	.....	.....	.....	.....	.....	.....	.....	5.54	.....	1.80	T.	8	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	13	.....	.....	.....	.....	.....	.....	.....	4.62	+2.21	2.50	T.	10	.....	.....	.....	.....	Miss Carrie S. Adams.
Manchester	Clay	1400	7	.....	.....	.....	.....	.....	.....	.....	2.61	.....	0.91	T.	7	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	48.8	− 8.3	85	17	25	31	54	3.03	−0.07	0.84	T.	12	14	4	13	w.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	51.4	− 5.8	84	18	22	31	50	3.03	+0.73	1.30	0	7	20	8	3	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	27	48.6	6.2	84	17	22	31	41	4.34	+1.94	1.86	T.	9	19	4	8	nw.	W. R. McKee.
Pikeville	Pike	634	11	.....	.....	.....	.....	.....	.....	.....	3.45	+1.01	1.60	T.	6	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	23	49.9	− 8.0	83	17	24	31	31	3.95	+1.70	1.95	T.	8	13	6	12	.....	J. W. Crooke.
Weeksbury	Floyd	1216	3	53.4	.....	86	17	29	13†	44	3.60	.....	1.59	.....	5	19	6	6	.....	O. A. Lund.
Williamsburg	Whitley	939	19	51.0	− 8.9	89	17	23	31	42	4.09	+1.54	1.82	T.	8	17	3	11	s.	N. C. Jones.
State averages and extremes		.....	.....	51.1	.....	90	17	20	24	54	3.18	.....	2.50	0.1	7	14	8	9	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc. T Precipitation is less than 0.01 inch rain or melted snow

† Also on other dates. †† Received too late to be included in means and summaries.

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.

Daily Precipitation for October, 1917.

Stations		Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G																			[illegible]				[illegible]				[illegible]	[illegible]		1.00		[illegible]
Blandville	M			.13								.03						T.	.36	.02				T		[illegible]		[illegible]		.83			[illegible]
Calhoun	G			.02					T		T	T.	.25							.86				[illegible]			.41	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
Earlington	G												.40							.96				T.			[illegible]	[illegible]	[illegible]		[illegible]		[illegible]
Greenville	G												.61							1.10							.60			.82			[illegible]
Hopkinsville	C												.65							.55							.62	[illegible]		[illegible]			[illegible]
Marion	O																		.79					T			.44				T		1.23
Mayfield	M				.15								.15							.80							.23	[illegible]			[illegible]		[illegible]
Owensboro	O				.20						T	T	.23						T.	1.30				[illegible]	T.		[illegible]	[illegible]	.03		1.10		[illegible]
Paducah	O							T.				T							.30	.53				T			[illegible]	[illegible]		.83			[illegible]
Princeton	G																																
Russellville	G												.81						.13	.43								.20			.23	[illegible]	[illegible]
Central Division.																																	
Alpha	C				T.	T.			T.											1.35				T.	T.		.25	.20		.70			2.50
Anchorage	O			.32							T.	.25	.46						T	.81				.06			.28			1.39			3.57
Bardstown	S												.82							.88					.05						1.40		2.05
Bowling Green	G								T.				1.00							.45								.23	.15		1.30		3.13
Brownsville	G								.02				.98							.55				T	T		.07	.21	.17		.87		2.87
Burnside	C								.08	T.			.87							2.35	.10				T					.15	.75		4.30
Carrollton ‖	O				.21	.07			.01			.01	.72							.90				.04							1.24		3.20
Cloverport ‖	O				.23						.01		.39							1.13				.05	T.		.20	.17			.85	T	3.03
Edmonton	G											.90															.18			.73			
Eubank	C												.96							1.33	.13				.05				.49		.65		3.61
Frankfort	K				.12	.02			.03		T.	T.	.77							.65	T			.10	.07		T.	.10	.10		.92	T.	2.88
Franklin	G																																
Greensburg	G								.05				1.03							.58				.05	T		T	.08	.27		1.09		3.15
High Bridge	K				.04	.02							.71							.63	.06				.10			.08	.21		.73		2.58
rvington	O			.15							T.	T.	.42						T.	.73				.08	T.		.23	.06		.78	T.		2.45
unction City	K			.01	.02							.02	1.01							1.10				.10			.15	.37		.78	.09		3.65
Leitchfield	G			T.								.69							*	.72				T			.31	.11		1.14	T		2.97
Lexington ***	K			.07	.04	T.		T.	.04		T.	.49	.21						.28	.22				.04			.08	.18		.71	T.		2.36
Loretto	S			.05					T.				.90						.20	.65				.05	.02			.15		1.40			3.42
LOUISVILLE***	O			.27		T.		T.	T.	T.	T.	.60	.01						.50	.13				.01			.25	.07		.62	T.		2.46
Do (Cherokee Park)	O			.23					.01		.02		.64						.08	.53				.03			.23	.10		.88			2.75
t. John	S				T.				T.			T.	.76						.02	.57				.02	.10		T	.25	T.		1.45		3.17
cott	L			.34	.05	T.			T.		.09	.10	.60					.02	.90				T	.08	.02		.04	.15		.95	.15		3.49
helbyville ‖	S			.18					T.				.77							.07				.05	.10			.12	.05	.03	.78		2.18
Taylorsville	S			.08	T.				.03			.02	.76							.79				.10			.12	.06		.94	.01		2.91
Williamstown ‖	L				.25				.08			.01	.71								.02			.02			.01	.05	.12		.95	T.	
Woodbury ‖	G												.92					.06	.48					T.	T.		.07	.22	.17		1.03		2.95
Eastern Division.																																	
Beattyville ‖	K								.05	.08			.76							1.70	.35				.17				.23		.65	T.	3.99
Berea	K								.12			.10	1.40							1.72				.16			.11	.21		.22	.70		4.74
Catlettsburg ‖	B				.06							.21	.79							1.65	.41				.33				.38		.45		4.28
Falmouth ‖	L				.34				.04				.73							.70				.05	.03			.08	.16		.69	T.	2.82
Farmers	L					.13							.95							1.95				.13	.05			.33			.75		4.29
Hazard	K																																
ackson ‖	K				T.				T.	.12		T.	.78							2.00	.45				.25				T.		.60		4.20
London ‖	C									.10			.80							1.80	.85				.08			.60	.24		1.05		5.54
Louisa	B					.10			T.	.08		.27	.57							2.50	.18				.23	.04	T.		.20		.45		4.62
Manchester ‖	K												.31								.91				.03			.27	.16		.87	.06	2.61
Maysville ‖	O				.30	.02			.05	T.		.01	.72							.84	.21			.02	.17			.06	.15		.48	T.	3.03
Middlesboro	C					.11			.08				.32							1.10								.03	.09		1.30		3.03
Mount Sterling ‖	L				.05	.02	T.					T.	.82							1.86	.21	.20			T.			.15	.35		.68	T.	4.34
Pikeville ‖	B									.10		.15	.50							1.60					.50						.60		3.45
Richmond ‖	K				T.	T.			.15				.75							1.95	.05			T.	.10			.10	.20		.65	T.	3.95
Weeksbury	B								.26		.08		.67							1.59										1.00			3.60
Williamsburg ‖	C									.05		T	.80							1.82	.44				.13			.11	.09		.65		4.09

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

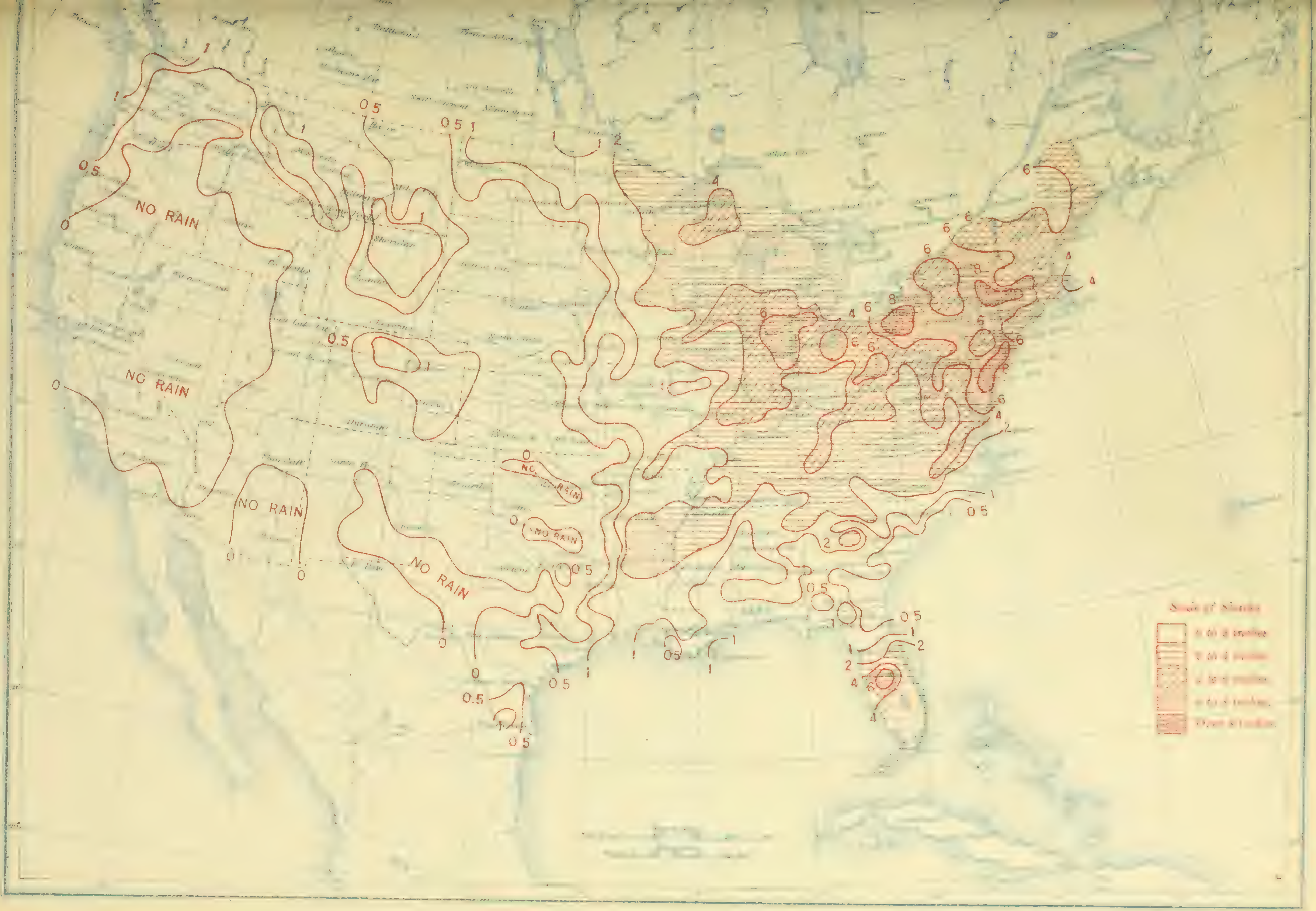
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for October, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	76	80	74	77	70	64	75	60	65	59	60	50	62	77	83	85	88	82	52	58	53	66	40	47	58	59	58	70	60	40	50	64.5
	Minimum	36	34	37	56	52	33	33	35	30	34	31	32	24	28	41	38	40	45	39	25	28	30	33	26	25	29	37	29	42	28	27	34.1
Blandville	Maximum	69	75	76	76	69	62	71	63	60	54	62	53	61	75	82	81	84	83	50	58	52	64	46	45	60	59	59	73	70	45	51	64.1
	Minimum	59	48	60	53	51	39	44	41	31	41	31	33	28	43	55	55	59	50	38	31	35	36	31	38	34	48	46	41	34	27	33	41.7
Calhoun	Maximum	72	79	70	80	73	67	76	71	65	57	56	53	63	75	85	85	87	83	75	57	56	66	57	47	58	56	55	69	69	41	49	66.2
	Minimum	38	39	55	49	57	35	37	47	29	41	33	31	24	38	59	53	54	68	36	26	37	33	30	28	28	47	42	32	33	27	29	39.2
Earlington §§	Maximum	76	84	76	83	71	70	78	62	68	58	57	51	66	76	87	87	89	88	50	59	59	68	40	44	61	58	58	71	70	43	52	66.5
	Minimum	36	38	44	51	52	34	37	49	27	29	30	32	25	37	60	53	55	67	38	26	38	32	32	31	35	38	42	34	40	28	30	38.8
Greenville	Maximum	70	79	73	79	72	63	75	63	64	60	58	55	62	75	83	85	87	83	75	57	56	64	53	45	59	57	..	70	71	41	52	*66.2
	Minimum	36	35	59	54	50	39	35	48	26	40	30	30	35	35	55	53	51	68	37	25	40	30	31	28	30	47	..	32	34	28	28	*39.0
Hopkinsville §§	Maximum	74	77	76	79	74	66	74	70	64	62	62	59	61	76	83	86	85	83	71	57	57	65	59	45	58	58	59	72	57	72	52	67.5
	Minimum	39	42	56	58	52	39	42	49	31	42	30	32	27	39	54	52	58	67	39	28	41	32	33	31	34	48	44	38	27	35	30	40.9
Marion	Maximum	71	77	76	80	70	66	75	70	63	62	56	58	61	75	84	84	87	77	60	55	55	64	56	43	56	55	57	70	69	52	50	65.6
	Minimum	45	38	35	37	30	38	44	47	33	35	33	30	30	45	55	64	58	57	42	31	37	37	29	34	35	47	45	37	32	27	32	39.3
Mayfield §§	Maximum	72	79	79	80	74	67	75	61	64	64	71	55	64	77	84	84	86	85	53	68	57	65	45	48	62	58	73	85	68	42	53	67.7
	Minimum	35	35	44	56	50	37	36	44	25	27	27	30	23	25	47	54	54	61	36	28	32	33	32	32	31	39	40	50	49	28	29	37.7
Owensboro §§	Maximum	67	74	68	75	65	61	72	56	61	54	55	48	58	74	82	78	86	83	46	52	51	63	39	48	56	54	53	68	69	40	46	61.4
	Minimum	40	42	53	52	54	41	39	43	33	36	41	32	26	33	53	55	55	65	38	28	35	38	32	29	37	39	43	34	53	29	30	40.6
Paducah (Lone Oak)	Maximum	76	82	85	84	84	68	80	75	68	64	70	60	67	70	86	88	90	76	88	56	54	69	60	61	62	60	62	73	72	50	53	70.7
	Minimum	42	46	62	52	50	38	46	47	29	44	32	31	29	58	55	56	58	49	37	30	33	32	30	38	34	36	46	37	33	28	34	41.0
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	71	78	78	81	72	65	76	60	64	58	62	52	63	77	82	84	86	82	49	58	64	58	54	41	45	60	59	60	71	76	52	65.7
	Minimum	36	48	55	56	51	36	36	46	28	39	30	31	26	28	49	54	55	58	39	26	32	31	29	28	26	31	38	40	37	42	28	38.4
Central Division.																																	
Alpha	Maximum	62	62	69	74	68	57	65	50	54	60	61	46	54	67	72	72	79	76	70	54	52	50	41	38	52	56	53	70	75	72	47	60.6
	Minimum	40	40	57	63	61	39	37	47	37	49	34	37	29	45	58	55	50	60	41	35	38	32	38	30	33	55	48	31	52	35	29	43.1
Anchorage	Maximum	68	75	70	75	68	62	72	61	60	62	58	46	46	70	78	75	83	78	68	56	54	59	51	48	56	56	56	64	74	36	46	62.3
	Minimum	32	35	48	52	43	30	34	37	25	37	35	29	25	33	55	51	52	52	30	24	34	29	29	35	35	38	34	28	34	23	23	35.4
Bardstown §§	Maximum	73	76	70	78	70	73	74	61	66	65	63	48	60	73	79	82	88	82	48	60	58	66	42	43	61	62	54	72	75	38	49	64.8
	Minimum	34	36	47	55	49	33	31	46	26	32	41	31	24	26	46	53	50	52	39	21	28	32	34	20	30	32	36	29	35	29	28	35.6
Bowling Green §§	Maximum	77	78	75	75	72	74	76	71	70	62	66	61	75	78	85	87	90	88	57	60	64	62	54	57	58	60	59	70	72	74	56	69.8
	Minimum	39	40	52	44	37	35	35	47	45	38	37	32	30	35	45	52	52	65	39	26	39	38	38	28	31	31	32	32	39	29	29	38.4
Edmonton	Maximum	66	71	..	..	..	..	70	62	61	64	..	59	74	..	80	83	84	80	..	..	64	59	57	57	..	57	..	67	76	44	47	'66.0
	Minimum	37	37	..	..	..	..	32	45	32	36	..	26	34	..	50	49	49	63	..	..	25	28	33	33	..	32	..	35	42	25	24	'36.5
Eubank §§	Maximum	63	73	71	75	70	58	70	51	59	63	61	48	58	70	75	80	83	78	43	57	60	62	41	38	58	60	62	70	75	41	50	62.0
	Minimum	33	36	36	48	52	35	30	34	33	31	35	33	24	26	35	52	51	53	42	27	34	28	30	23	28	32	30	29	34	28	22	34.3
Frankfort	Maximum	64	71	70	72	69	60	68	65	56	59	61	53	54	71	76	75	81	79	75	51	53	58	55	45	53	59	52	63	76	57	47	62.8
	Minimum	37	37	50	58	54	37	33	46	30	39	43	33	29	52	57	53	49	58	39	29	40	34	32	28	35	40	39	32	50	30	27	40.3
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	65	72	72	76	72	60	76	56	58	64	62	47	57	72	76	80	83	80	45	55	56	62	43	44	58	64	57	69	77	39	52	62.7
	Minimum	35	35	48	48	49	33	29	46	28	35	38	33	24	30	48	49	43	53	39	25	33	28	34	21	31	39	35	37	37	29	23	36.0
Irvington	Maximum	66	74	69	72	66	59	70	64	65	59	59	50	56	73	78	75	83	80	73	53	53	61	55	46	65	58	53	65	73	36	49	63.2
	Minimum	39	42	57	52	52	38	40	46	34	44	38	32	28	41	52	56	54	67	38	28	41	37	31	27	32	48	37	34	35	29	30	40.6
Junction City	Maximum	66	73	72	74	70	60	70	60	64	63	65	55	59	72	78	80	85	80	78	55	56	65	54	41	58	63	65	68	78	55	49	65.5
	Minimum	36	33	48	63	56	35	28	44	29	30	39	32	24	27	57	54	46	56	37	24	33	29	32	26	29	34	45	25	55	27	20	37.2
Leitchfield	Maximum	67	72	72	74	70	60	70	67	57	61	60	53	56	72	78	79	84	80	70	56	55	62	51	45	57	62	55	69	75	37	51	63.8
	Minimum	37	38	53	55	50	38	35	47	32	38	35	31	26	35	52	54	53	64	37	25	40	31	32	25	27	43	38	32	34	28	26	38.4
Lexington	Maximum	63	70	66	70	64	56	66	59	55	58	57	46	53	70	74	74	82	77	65	50	51	59	49	41	54	58	50	64	74	30	45	59.7
	Minimum	42	45	53	57	43	38	42	40	36	42	42	30	32	41	56	59	55	63	36	33	41	35	26	25	39	42	41	34	30	25	28	40.4
Loretto	Maximum	67	73	73	76	70	60	70	64	59	64	60	57	58	72	80	78	76	86	76	56	55	60	58	44	58	61	53	68	85	74	49	65.8
	Minimum	53	35	60	54	50	33	30	45	26	36	40	31	24	32	56	55	56	46	36	23	36	29	30	23	28	36	35	25	40	29	22	37.2
Louisville	Maximum	66	72	66	73	65	60	70	56	58	59	58	45	56	71	78	76	83	79	50	50	53	59	46	48	54	57	50	64	71	34	45	60.4
	Minimum	48	46	60	56	48	42	39	42	36	44	40	32	33	41	56	54	56	50	37	31	40	38	31	31	38	46	41	34	31	27	31	41.3
Do. (Cherokee Park)	Maximum	63	70	68	71	68	57	68	65	56	58	59	53	54	71	77	73	81	79	76	51	54	59	55	47	54	59	51	64	73	43	47	62.1
	Minimum	40	40	55	51	54	39	35	46	31	41	41	31	28	37	54	51	47	62	37	26	40	35	31	27	34	43	39	28	41	27	27	39.4
St. John §§	Maximum	67	79	70	78	73	70	72	59	59	65	57	48	60	70	80	79	84	79	51	55	57	60	42	45	56	60	53	68	71	39	50	63.1
	Minimum	35	36	48	54	52	35	32	46	29	37	31	30	31	34	47	57	52	61	38	24	32	32	33	23	27	34	37	29	53	28	24	37.5
Scott	Maximum	67	76	67	70	65	60	67	61	57	49	54	47	55	68	78	70	81	79	71	62	54	54	50	43	53	55	48	59	73	55	43	60.8
	Minimum	41	38	54	53	52	36	35	45	30	41	32	31	29	33	54	50	49	62	36	29	39	32	33	28	34	39	37	30	52	29	27	39.0
Shelbyville §§	Maximum	69	77	69	75	67	63	72	59	62	62	62	44	59	73	79	76	85	83	47	59	55	61	41	44	56	57	50	56	72	33	47	61.7
	Minimum	35	38	42	42	53	33	34	42	27	34	40	30	26	28	42	51	51	52	37	25	27	31	33	24	32	33	37	30	38	26	23	35.1
Taylorsville	Maximum	64	70	68	73	66	58	69	61	55	60	60	52	56	71	76	74	81	80	73	50	54	59	54	45	54	60	52	65	73	43	47	62.0
	Minimum	35	35	46	57	49	31	30	46	26	36	36	32	25	29	55	49	46	58	39	25	38	32	31	25	31	39	36	26	43	28	24	36.7
Williamstown §§	Maximum	69	74	67	74	63	63	70	58	60	59	56	47	57	70	79	79	85	81	59	57	56	58	39	41	55	65	45	66	74	34	45	61.5
	Minimum	40	41	49	55	57	34	37	38	32	32	37	32	29	34	40	50	49	55	37	28	36	33	34	27	34	38	39	30	30	26	25	37.4
Eastern Division.																																	
Beattyville §§	Maximum	68	79	67	77	70	63	75	51	61	64	61	51	63	78	82	84	89	81	46	58	66	67	42	41	55	62	52	74	79	35	55	64.4
	Minimum	39	38	42	52	49	37	33	37	31	32	37	37	28	29	34	46	46	46	45	29	35	33	34	26	32	35	33	33	32	30	20	35.8
Berea	Maximum	65	72	69	75	64	58	71	68	60	61	60	52	62	72	78	78	85	86	67	60	61	66	56	60	63	56	53	74	76	58	62	66.1
	Minimum	35	35	45	54	34	33	30	45	28	32	40	33	28	32	50	58	53	56	37	27	32	30	30	26	33	36	35	28	40	25	22	36.2
Farmers	Maximum	67	70	67	75	68	61	66	68	57	59	57	52	58	70	75	83	86	86	69	57	57	68	59	44	53	57	59	67	84	68	50	65.1
	Minimum	33	32	43	56	43	33	32	42	27	29	33	34	24	25	54	50	46	48	32	27	33	30	32	27	33	30	31	29	45	27	20	34.8
Maysville §§	Maximum	68	75	70	76	69	62	71	53	60	56	57	42	59	73	78	78	85	74	46	54	60	60	43	45	58	59	50	64	85	35	50	61.8
	Minimum	37	38	48	54	52	38	32	38	30	32	35	33	28	30	42	50	42	43	45	28	29	31	34	29	34	33	35	30	31	28	25	35.9
Middlesboro	Maximum	63	70	70	78	73	60	67	61	58	60	61	61	60	69	74	80	83	84	73	58	63	65	56	44	42	59	62	70	76	70	48	65.1
	Minimum	36	40	55	56	52	38	32	43	35	33	33	38	28	32	47	45	46	34	30	33	40	42	38	28	36	38	39	31	42	29	22	37.8
Mount Sterling §§	Maximum	65	72	71	72	68	55	70	51	56	62	57	44	56	70	76	76	84	81	43	52	59	60	39	45	53	58	52	65	76	32	48	60.3
	Minimum	38	35	50	54	53	35	30	43	31	31	35	34	28	29	45	55	50	52	43	26	36	30	38	26	32	38	34	28	39	27	22	37.0
Richmond §§	Maximum	66	70	68	69	65	60	67	52	59	58	57	45	56	70	76	77	83	77	43	57	58	59	42	42	54	60	54	62	72	32	45	59.8
	Minimum	41	40	52	58	55	37	37	44	32	38	40	33	30	39	45	56	53	60	40	30	37	34	37	25	34	40	40	31	51	28	24	40.0
Weeksbury	Maximum	66	75	76	79	69	59	73	59	59	62	64	59	60	76	80	82	86	84	80	55	63	64	54	37	53	65	62	73	80	72	50	67.0
	Minimum	39	38	45	57	53	41	31	42	39	33	41	39	29	32	47	53	51	48	40	35	30	34	32	29	35	34	50	36	53	30	33	39.7
Williamsburg §§	Maximum	66	74	75	79	72	65	72	57	60	65	67	50	60	72	80	82	87	79	50	63	61	63	44	39	60	64	65	72	72	40	54	64.8
	Minimum	36	38	40	46	53	37	34	40	34	32	35	38	28	30	41	45	47	47	70	28	29	29	34	26	29	33	39	34	55	39	23	37.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

*, †, ‡, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

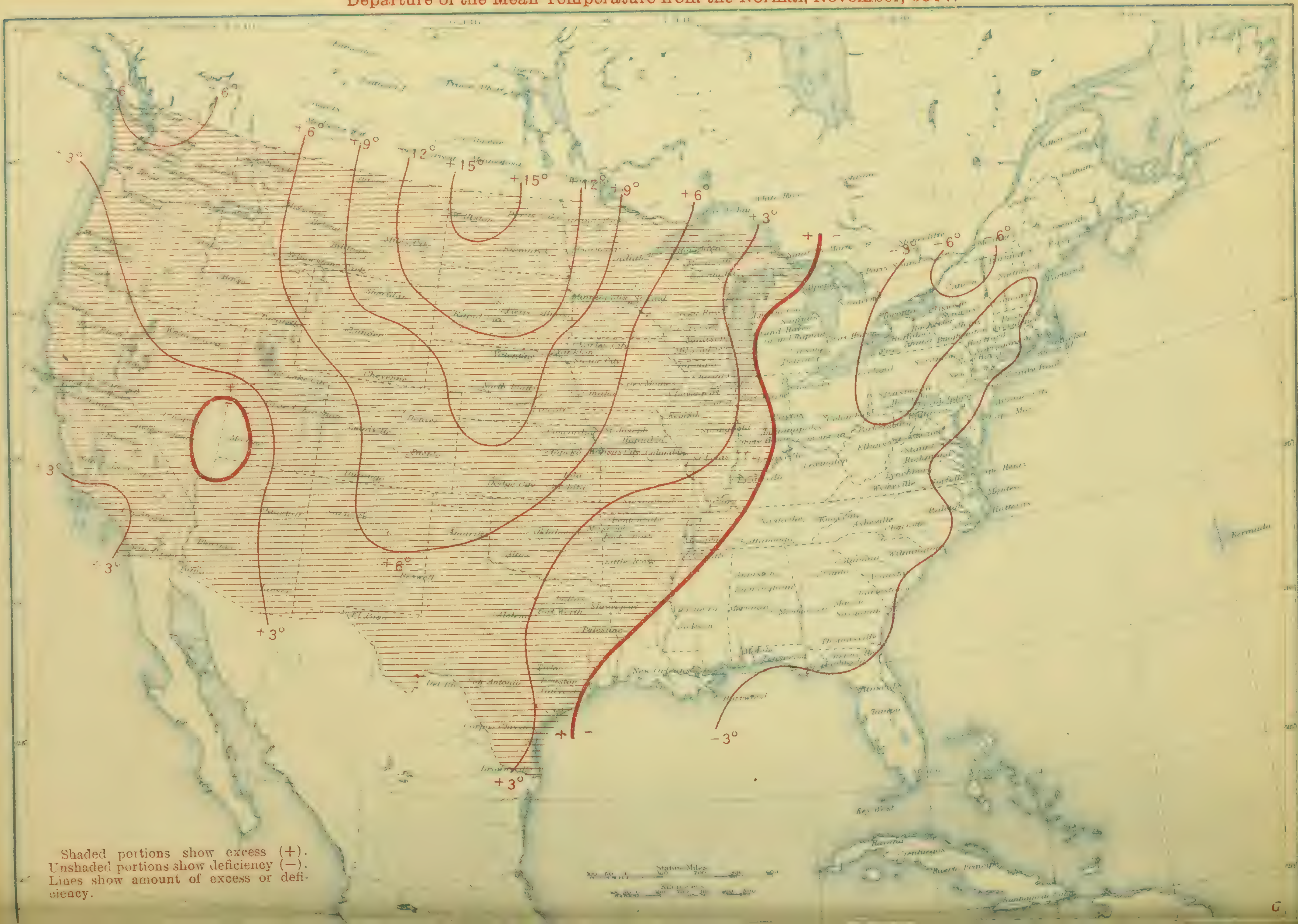
KENTUCKY SECTION

NOVEMBER, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 19, 1917

Departure of the Mean Temperature from the Normal, November, 1917.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXII. Louisville, Ky., November, 1917. No. 11

GENERAL SUMMARY.

The temperature for the month averaged somewhat below normal, but on account of a long period of mild weather conditions were relatively more favorable than during October preceding. From the 4th to 21st, except a few days, temperatures were above normal, the weather being warm enough to insure germination of late sown wheat in sections where there was sufficient moisture, and to promote the rapid growth of wheat already up. During this period maximum temperatures were 60° or higher on about twelve days, and 70° or above on several days. These warm days greatly improved the condition of wheat, which showed a good stand of well-rooted plants at the end of the month in most districts.

Precipitation averaged only slightly more than one-third of the normal amount, and nearly all of this occurred during the last four days. The heaviest precipitation occurred over the principal grain growing sections; i e., the central and western counties. In the eastern counties some grain had not germinated at the end of the month on account of lack of moisture. The long period of dry weather enabled corn, which was somewhat sappy at the end of October, to dry out thoroughly, and gathering of this crop proceeded rapidly under ideal conditions. Tobacco cured out well but was too dry to handle until the last few days of the month.

PRESSURE.

Only three low pressure formations passed over or near this section during the month; their periods were: 10-12th, 21st-22d, and 27-30th. The latter gave practically all the precipitation occurring during the month. High pressure formations dominated weather conditions during all other periods of the month.

The mean sea-level pressure, based on the records of two stations, was 30.22 inches. The extremes were 30.72 inches on the 26th at Louisville and Lexington, and the lowest 29.42 inches at Lexington on the 22d.

TEMPERATURE.

The average temperature for the State, based on the reports of 39 stations, was 44.3°, which is 1.7° below normal. The first three days were abnormally cold, and also the period, 23d-26th. Temperatures were generally above normal during the periods 4-12th, 17-18th, and 28th-31st. During the first three weeks minimum temperatures were rather high for November, an important element favoring the growth of wheat. No hard freezes occurred until the 24-26th, and these were not damaging to fall grain because of the dryness of the soil. The extremes were 78° at Earlington on the 9th, and 11° at Anchorage on the 24th and at Loretto on the 26th, both well within the records of past years.

PRECIPITATION.

The average precipitation, determined from the records of [illegible] stations, was 1.25 inches, a deficiency of 2.34 inches. Less than an inch occurred over the southeastern and extreme northern counties, at some stations the monthly total being less than half an inch. Over a wide belt extending from the mouth of the Big Sandy to Henderson and Christian counties amounts ranged between one and two inches. Between two and three inches occurred in the extreme western counties. There were a few good showers in the extreme western counties on the 11th, otherwise practically no precipitation occurred until the 27th. Amounts at the various stations ranged between 0.26 inch at Carrollton and 2.89 inches at Blandville. Snowfall was light, averaging only 0.1 inch for the State.

WIND.

The total wind movement at Louisville was 6,723 miles, and at Lexington 7,815 miles, with average hourly velocities of 9.3 and 10.9 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 39 miles from the north on the 18th, and at Lexington 32 miles per hour from the northwest on the 22d.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 79 per cent, at 2 p. m. 54 per cent, and at 7 p. m. 60 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 54 and at Lexington 38.

MISCELLANEOUS.

Rivers.—At the beginning of the month good stages prevailed in the Ohio River; but a rapid decline set in about the 3d in the upper reaches and extended into the lower river by the 9th. After the 14th pool stages obtained above Louisville. The decline continued in all districts and stages were generally low by the end of the month.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 25-year normal.	Highest.	Lowest.	Monthly average.	Departure from 25-year normal.	No. of days with .01 in. or more.
1889	43.1	−2.9	85	10	6.64	+2.45	
1890	48.6	+2.6	81	19	4.87	+1.28	
1891	43.5	−2.5	75	10	6.04	+2.45	
1892	42.8	−3.2	78	9	3.85	+0.26	
1893	44.3	−1.7	79	−2	3.12	−0.47	
1894	43.3	−2.7	80	8	1.32	−2.27	4
1895	45.8	−0.2	85	16	4.29	+0.70	7
1896	49.3	+3.3	80	11	5.01	+1.42	8
1897	47.8	+1.8	78	12	4.69	+1.10	10
1898	43.2	−2.8	80	10	2.79	−0.80	8
1899	49.8	+3.8	79	20	2.12	−1.47	8
1900	47.0	+1.0	83	15	7.78	+4.19	8
1901	41.8	−4.2	82	11	1.52	−2.07	4
1902	53.4	+7.4	90	20	4.42	+0.83	11
1903	42.5	−3.5	81	5	3.01	−0.58	8
1904	44.7	−1.3	79	14	0.89	−2.70	3
1905	46.4	+0.4	79	14	3.55	−0.04	7
1906	46.1	+0.1	93	11	5.02	+1.43	7
1907	44.2	−1.8	75	15	3.49	−0.10	7
1908	48.6	+2.6	80	8	2.61	−0.98	7
1909	54.7	+8.7	86	19	2.29	−1.30	6
1910	41.1	−4.9	78	11	2.04	−1.55	6
1911	41.6	−4.4	85	9	4.51	+0.92	8
1912	45.2	−0.8	82	10	1.22	−2.37	4
1913	50.5	+4.5	81	8	3.25	−0.34	9
1914	46.9	+0.9	83	5	1.23	−2.36	5
1915	49.8	+3.8	85	16	4.80	+1.21	9
1916	47.8	+1.8	83	8	1.52	−2.07	1
1917	44.3	−1.7	78	11	1.25	−2.34	5

Climatological data for November, 1917.

				Temperature, in degrees Fahr.							Precipitation, in inches.					Number of days.				
Stations.	Counties.	Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	14	44.4	−1.9	74	8	18	25	45	1.79	−1.07	1.06	T.	6	13	12	5	s.	Mrs. Della M. Davis.
Blandville	Ballard	445	35	48.0	+1.4	74	7	21	24	33	2.89	−1.18	0.99	T.	5	12	6	12	sw.	E. W. Horr.
Calhoun	McLean	437	13	46.0	−2.4	74	7[1]	17	25	42	2.00	−1.11	0.71	T.	6	13	7	10	nw.	W. A. Taylor.
Earlington	Hopkins	420	26	46.3	−1.4	78	9	17	25	45	2.37	−2.01	1.05	T.	6	15	2	13	se.	Brick Southworth.
Greenville	Muhlenburg	519	0	[c]46.8	......	74[c]	6[1]	17[c]	25	41	1.90	......	0.49	0.2	6	8[c]	7[c]	12[c]	n.	C. R. Lovell.
Hopkinsville	Christian	524	20	47.6	−0.7	74	5[1]	20	25	41	1.80	−2.35	0.90	T.	4	4	6	10	w.	W. F. Randle.
Marion	Crittenden	571	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. C. Paris.
Mayfield	Graves	364	7	47.3	....	76	7[1]	25	21[1]	42	2.48	.....	1.00	T.	5	7	11	12	s.	J. N. Davis.
Owensboro	Daviess	479	20	44.6	−2.9	72	5[1]	19	25	37	1.48	−1.97	0.46	T.	6	12	4	14	sw.	Henry S. Berry.
Paducah	McCracken	341	17	48.1	−0.8	77	8	18	24	37	2.42	−1.92	0.80	T.	6	17	0	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russellville	Logan	590	5	45.6	...	74	9[1]	17	25	42	1.07	.....	0.90	T.	4	18	0	12	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	23	45.1	−4.4	71	6[1]	18	25	37	0.30	−3.43	0.30	T.	1	16	1	13	w.	W. W. Hicks.
Anchorage	Jefferson	700	16	42.2	2.3	72	5	11	24	41	1.55	−1.42	0.74	T.	4	17	3	10	sw.	C. E. Barret.
Bardstown	Nelson	637	20	43.8	−3.2	76	7	13	25	46	1.45	−1.93	0.92	T.	4	9	7	14	e.	Chas. M. Talbott.
Bowling Green	Warren	500	26	46.2	−1.1	72	9	18	25	42	1.18	−2.43	0.53	T.	4	18	6	6	n.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	413	...	.....	.....	.....	.....	.....	.....	.....	1.31	......	0.66	0.2	5	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	24	.....	.....	.....	.....	.....	.....	.....	0.38	−3.29	0.16	T.	5	.....	.....	.....	.....	C. L. Hurt.
Carrollton	Carroll	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.26	−2.67	0.22	.....	3	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	3	.....	.....	.....	.....	.....	.....	.....	1.77	......	0.75	0.3	5	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	660	23	44.6	−2.2	73	7[1]	15	25	42	.....	.....	.....	T.	....	11	7	12	n.	P. W. Ray.
Eubank	Pulaski	1177	22	42.9	−1.6	71	6[1]	14	25	41	0.74	−2.29	0.30	T.	4	16	3	11	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	24	43.6	−2.6	67	6	17	26	35	1.33	−2.08	0.80	T.	5	16	4	10	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Newman.
Greensburg	Green	581	24	42.8	−1.9	72	6[1]	14	25†	43	1.08	−2.60	0.44	T.	8	10	1	19	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	14	.....	.....	.....	.....	.....	.....	.....	1.21	−1.50	0.64	.....	5	...	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	19	45.3	−1.4	69	6	18	25	31	1.77	−1.44	0.85	T.	3	16	3	11	sw.	W. J. Piggott.
Junction City	Boyle	985	23	44.4	+1.8	75	13	16	24[1]	42	1.36	−1.78	0.32	0.5	8	15	7	8	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	21	44.5	1.8	73	8	14	25	38	1.97	−1.96	1.12	T.	4	14	5	11	nw.	John E. Stone.
Lexington	Fayette	989	29	44.0	−0.7	67	6	16	24	25	1.03	−2.45	0.50	0.4	7	10	9	11	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	18	[c]43.4	−3.1	70[1]	6	11[j]	26	42[j]	1.70	−1.26	0.65	T.	4	16	8	6	.....	Loretto Academy.
LOUISVILLE	Jefferson	525	44	45.2	−1.1	71	6	22	24	30	1.35	−2.83	0.74	T.	5	12	7	11	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	531	7	43.2	.....	69	6	17	25[1]	36	1.57	......	0.67	T.	6	12	8	10	sw.	Wm. I. Hunt.
St. John	Hardin	777	20	43.2	−2.2	73	7	14	25	41	1.58	−1.90	0.75	T.	7	18	1	11	......	Sisters of Loretto.
Scott	Kenton	900	19	42.7	−2.3	71	6	14	24†	37	0.44	−2.36	0.14	0.1	6	10	5	15	s.	E. B. Wilson.
Shelbyville	Shelby	825	28	42.0	−1.9	71	5[1]	15	24[1]	42	1.38	−2.57	0.70	T	4	13	7	10	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	14	42.4	−2.5	69	6	14	24†	40	1.32	−1.78	0.48	0.1	6	12	2	16	s.	E. D. Bourne.
Williamstown	Grant	943	14	44.0	−1.1	74	6	14	24	37	0.83	−1.51	0.38	0.3	4	16	1	13	......	Miss Rose Carter.
Woodbury	Butler	330	..	.....	.....	.....	.....	.....	.....	.....	1.37	.....	0.57	T.	4	...	...	...	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	13	[a]42.0	1.7	73	10	15	25[1]	43	0.70	−2.05	0.50	0.5	4	13	2	15	sw.	A. H. Bowman.
Berea	Madison	1070	15	44.1	3.1	76	18	16	26	43	0.83	−2.07	0.21	T.	6	18	3	9	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	28	.....	.....	.....	.....	.....	.....	.....	0.98	−1.47	0.46	......	4	...	.....	.....	.....	Forester Farley.
Falmouth	Pendleton	690	28	.....	.....	.....	.....	.....	.....	.....	0.62	−3.00	0.38	T.	3	13	7	10	....	J. V. Oldham.
Farmers	Rowan	668	9	41.6	−3.4	70	5[1]	16	24[1]	41	1.13	−1.60	0.41	0.9	4	17	2	11	w.	Durwood Cassity.
Hazard	Perry	....	1	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson	Breathitt	776	5	.....	.....	.....	.....	.....	.....	.....	0.72	......	0.42	T.	4	...	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	2	.....	.....	.....	.....	.....	.....	.....	0.92	......	0.30	.....	5	...	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	13	.....	.....	.....	.....	.....	.....	.....	0.84	−2.46	0.50	T.	4	...	.....	.....	.....	Miss Carrie S. Adams.
Manchester	Clay	1400	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5	...	...	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	19	41.2	−3.4	74	6	18	25[1]	44	0.84	−2.00	0.38	0.3	5	15	6	9	w.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	20	44.8	1.0	72	7	15	25[a]	43	0.36	−3.15	0.30	0.2	4	17	10	3	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	27	41.9	2.4	70	6	16	24	36	1.21	−2.24	0.68	0.2	4	19	1	10	w.	W. R. McKee.
Pikeville	Pike	654	11	.....	.....	.....	.....	.....	.....	.....	0.50	−2.37	0.30	T.	2	..	...	.....	.....	I. M. Williams.
Richmond	Madison	926	23	43.4	−3.4	71	6	18	24	34	1.10	−1.59	0.70	T.	5	12	7	11	.....	J. W. Crooke.
Weeksbury	Floyd	1216	3	45.8	......	70	11	21	24†	36	0.97	......	0.40	T.	5	10	13	7	.....	O. A. Lund.
Williamsburg	Whitley	939	19	44.6	3.1	72	7	16	26†	45	0.45	−2.48	0.20	T	5	16	4	10	w.	N. C. Jones.
State averages and extremes		....	..	44.3	....	78	9	11	24†	45	1.25	......	1.12	0.1	5	14	5	11	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc. T. Precipitation is less than 0.01 inch rain or melted snow.

[1] Also on other dates. †† Received too late to be included in means and summaries.

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.

Daily Precipitation for November, 1917.

Stations	Day of month.																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Western Division																															
eaver Dam G											.20	[illegible]												T			[illegible]	[illegible]	.32	.03	[illegible]
landville M											.99												T.			[illegible]	.47		[illegible]		[illegible]
alhoun G											.13	T										T	T			.02	.64	[illegible]	.71	[illegible]	[illegible]
arlington G											.16	.10											.02				.33	[illegible]	.71		[illegible]
reenville G											.25		.07													[illegible]	.49	.41	.55		[illegible]
opkinsville C										.15		T.													T.		.60	.30	[illegible]		[illegible]
arion O																															
ayfield M											.12	1.05											T			T	[illegible]	.95	[illegible]		[illegible]
wensboro O											T	.10	T										.02				[illegible]		[illegible]	.46	[illegible]
aducah O											.10											.11				.10	.80	[illegible]	[illegible]		[illegible]
rinceton G																															
ussellville G														.01									[illegible]					.15	[illegible]		[illegible]
Central Division.																															
lpha C																							T.					[illegible]	T		[illegible]
nchorage O											T.											T	T.				.71	.30	.17	.04	[illegible]
ardstown ‖ S												.06												T			[illegible]	.92	.38		1.45
owling Green G												.10												T.			[illegible]	[illegible]	.53		[illegible]
rownsville ‖ G												.07											.02	T.			.19	.57	.46		1.31
urnside C												T									T		.08				.04	.06	.16	.04	0.38
arrollton O												T	T.										.01						.22	.03	0.26
overport O												.22											.05	T			.11	.64	.75	T.	1.77
lmonton G																															
lbank C												.09												T				.30	.29	.06	0.74
rankfort K												.03	T										.02	T.			.03	.80	.45	T.	1.33
ranklin G																															
reensburg G											.03	.12	.02									.02	.03	T			.18	.24	.44		1.08
igh Bridge K												.15	.08														.01	.64	.33		1.21
vington O											.10	T.										T	T.	T		T	.82	.85	T.	T.	1.77
nction City K											.09	.18	.01									.08					.31	.32	.32	.05	1.36
itchfield G												.05										T	T			T	*	1.12	.80		1.97
xington *** K		T.									T.	.02										.01	.04				.36	.26	.32	.02	1.03
retto S																							.10				.65	.45	.50		1.70
UISVILLE*** O											.02	T.	T.								T	T	T.	T.			.69	.20	.42	.02	1.35
Do. (Cherokee Park) O											.07											.02	T.				.67	.28	.49	.04	1.57
. John S												.10	.03		T				T				.04	T.			.20	.75	.45	.01	1.58
ott L	T.																				T.	.03	.01				.09	.03	.14	.14	0.44
elbyville S																							.04	T			.14	.70	.50		1.38
ylorsville S											T.	.05										.01	.01	T			.48	.37	.40	T.	1.32
illiamstown L		T.																					T	.03				.37	.38	.05	0.83
oodbury G												.09												T			.31	.40	.57		1.37
Eastern Division.																															
attyville ‖ K												.03												.02	T.			.50	.15		0.70
rea K											T	.12	.21									.12	.11	T.					.12	.15	0.83
tlettsburg‡‖ B														.10														.46	.27	.15	[illegible]
lmouth L																							.05	T.				.38	.19	T.	0.62
rmers L																							.10				.32	.41	.30		1.13
azard ‖ K																															
ckson ‖ K													T.	T.									T.	.05			T.	.42	.20	.05	0.72
ndon ‖ C												.10											.11	.04				.15	.22	.30	0.92
uisa B																						T	T.	.08				.50	.22	.04	0.84
anchester ‖ K																						.10		.05							
aysville ‖ O																						T.	.02	.05			T.	.38	.32	.07	0.84
ddlesboro C												.02											.02						.30	.02	0.36
ount Sterling ‖ L	T											T.		T.										.05				.68	.43	.05	1.21
keville ‖ B														.30									T	T.				.20			0.50
chmond ‖ K												.03	.02										T.				.30	.70	T	.05	1.10
eksbury B												.40										.02	T	T.			.30	.10	.15		0.97
lliamsburg‖ C													T.								T		.09	.05			.08	.03	T.	.20	0.45

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

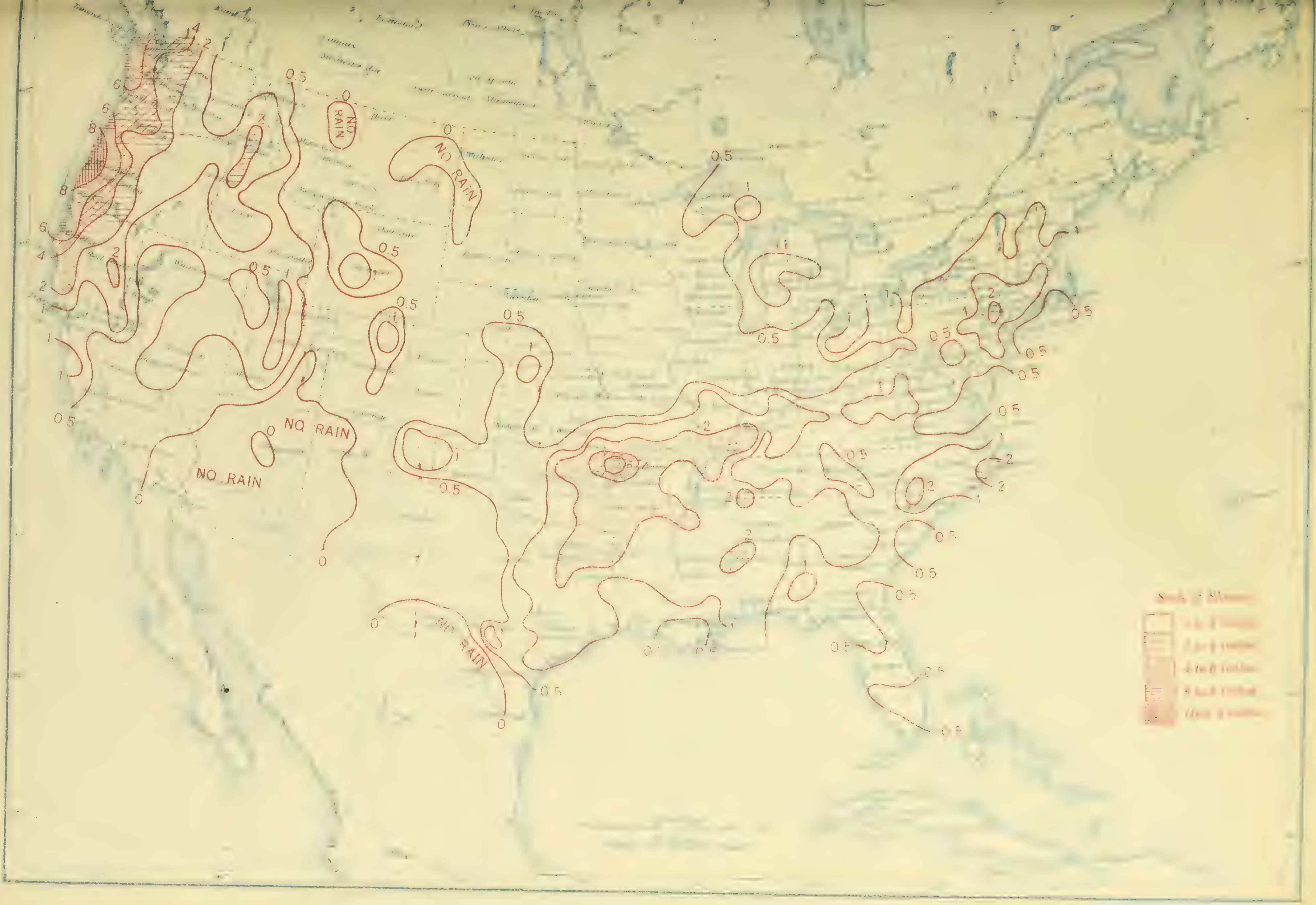
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for November, 1917.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	49	47	58	70	72	73	72	74	71	70	65	62	44	50	44	62	70	71	52	56	66	49	39	37	42	42	50	52	48	50	..	56.9
	Minimum	34	25	35	25	28	34	35	34	35	40	40	35	39	39	34	30	34	36	38	26	28	35	25	26	18	20	24	34	34	40	..	32.0
Blandville	Maximum	51	45	59	69	72	73	74	73	73	71	67	60	49	44	53	65	72	67	57	56	68	59	39	37	47	38	52	54	54	54	..	58.4
	Minimum	33	26	29	36	45	42	41	42	41	43	43	45	40	40	39	37	44	48	37	31	40	39	32	21	24	31	34	45	39	40	..	37.6
Calhoun	Maximum	48	49	60	71	75	76	74	72	74	71	61	60	49	47	46	65	73	66	60	56	66	60	39	38	46	40	45	48	51	47	..	57.8
	Minimum	24	28	26	31	34	34	34	35	37	35	50	45	39	40	34	35	35	40	37	27	37	39	30	27	17	20	31	40	41	40	..	34.1
Earlington §§	Maximum	49	50	61	75	75	76	76	77	78	72	58	60	43	47	47	65	76	73	55	55	68	50	35	40	47	44	50	52	45	49	..	58.3
	Minimum	26	29	25	30	33	34	35	35	36	35	41	43	39	41	39	35	35	40	40	25	37	46	32	25	17	22	32	41	41	41	..	34.3
Greenville	Maximum	51	47	..	70	73	74	73	72	74	71	59	..	61	..	49	64	72	71	64	57	68	60	39	37	45	38	56	51	52	50	..	c59.2
	Minimum	36	27	..	34	32	35	34	34	37	35	46	..	40	..	33	33	33	39	40	26	38	39	31	28	17	20	32	45	41	41	..	c34.3
Hopkinsville §§	Maximum	52	49	60	70	74	71	72	73	74	71	63	62	56	46	48	67	72	70	64	56	68	64	42	41	47	42	50	59	59	59	..	60.1
	Minimum	28	38	25	30	33	34	34	35	37	35	50	48	41	40	38	36	35	38	41	29	36	42	31	24	20	25	34	35	41	41	..	35.1
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mayfield §§	Maximum	49	48	58	70	73	73	76	76	75	71	67	60	50	42	54	66	73	68	51	55	68	50	38	40	49	50	53	59	46	54	..	58.7
	Minimum	30	25	25	28	32	35	36	36	37	38	50	47	40	37	38	38	42	42	39	28	36	41	31	26	26	32	36	45	40	40	..	35.9
Owensboro §§	Maximum	44	45	57	67	72	72	70	70	70	68	55	56	47	47	47	60	69	62	53	53	64	47	35	36	40	41	46	45	48	47	..	54.4
	Minimum	27	31	28	33	35	37	36	37	38	38	45	48	40	40	35	32	37	42	31	28	34	38	32	29	19	21	33	40	40	40	..	34.8
Paducah (Lone Oak)	Maximum	51	46	62	72	76	74	75	77	76	74	69	63	44	50	54	60	76	67	59	55	69	58	37	44	46	42	52	53	56	53	..	59.7
	Minimum	34	27	30	37	39	39	45	41	42	40	44	46	40	39	38	38	42	40	38	29	33	31	32	18	24	32	33	45	39	41	..	36.5
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	51	47	58	68	73	71	73	73	74	73	74	63	66	48	44	53	64	69	54	39	66	58	36	38	41	46	53	61	46	53	..	57.8
	Minimum	27	28	24	26	31	31	35	35	35	38	40	46	41	40	38	31	32	34	40	27	31	38	32	27	17	20	30	42	42	42	..	33.3
Central Division.																																	
Alpha	Maximum	46	38	32	63	66	71	68	70	71	70	66	54	50	44	43	51	68	70	55	55	62	52	47	44	47	47	49	58	52	55	..	55.5
	Minimum	25	30	25	29	30	35	38	35	38	38	49	50	46	33	35	35	31	37	40	36	37	47	33	22	18	19	40	50	31	30	..	34.7
Anchorage	Maximum	46	48	56	68	72	71	71	66	69	70	60	56	44	57	42	57	66	65	51	56	60	56	35	31	36	39	44	44	54	46	..	54.5
	Minimum	23	28	25	27	31	32	32	31	34	34	39	43	41	34	25	27	29	28	28	22	32	35	26	11	14	15	34	40	41	40	..	30.0
Bardstown §§	Maximum	50	48	59	72	75	74	76	71	74	72	61	63	46	57	43	62	68	70	53	58	62	52	33	33	43	44	46	50	52	51	..	57.3
	Minimum	24	28	24	26	29	30	32	32	33	34	36	46	42	37	28	28	30	36	33	23	31	39	30	15	13	14	15	37	43	42	..	30.3
Bowling Green §§	Maximum	59	46	58	70	71	71	70	70	72	70	68	65	48	50	43	65	69	71	56	58	67	52	39	37	48	43	50	61	53	55	..	58.5
	Minimum	27	29	26	28	29	34	35	35	38	38	39	40	42	42	36	32	33	35	37	30	38	42	32	25	18	21	27	43	45	43	..	34.0
Edmonton	Maximum	52	46	56	67	70	71	73	73	72	71	70	64	56	46	42	47	70	68	69	62	60	61	54	31	43	41	50	51	50	55	..	58.0
	Minimum	23	27	22	25	29	29	31	33	31	34	33	33	42	35	33	34	35	34	35	38	35	37	31	20	15	16	33	34	39	42	..	31.3
Eubank §§	Maximum	50	46	55	66	70	71	71	68	70	69	60	59	46	49	39	55	61	66	57	62	62	51	31	34	42	40	49	51	53	55	..	55.3
	Minimum	21	24	21	25	31	31	31	32	36	34	34	43	43	40	26	32	27	27	35	27	38	40	29	18	14	15	17	37	44	43	..	30.5
Frankfort	Maximum	46	45	55	61	65	67	66	63	66	66	61	57	54	57	52	56	63	65	59	55	60	58	41	32	37	38	43	46	52	51	..	54.6
	Minimum	29	33	29	29	31	32	33	35	34	35	36	45	43	35	29	32	29	35	32	24	34	39	29	18	21	17	35	41	42	44	..	32.7
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	51	46	57	65	70	72	72	71	69	71	60	61	45	51	42	59	64	68	53	61	64	53	34	32	44	41	48	53	54	54	..	56.2
	Minimum	22	23	22	24	27	28	29	29	32	31	33	43	42	41	29	26	26	29	34	25	27	39	31	17	14	14	21	38	45	42	..	29.4
Irvington	Maximum	47	45	56	63	68	69	68	68	68	68	60	58	52	52	45	59	64	65	55	55	63	58	40	32	41	38	45	48	47	47	..	54.8
	Minimum	30	30	30	32	37	39	38	37	40	40	52	50	40	38	35	34	35	45	34	28	38	37	30	25	18	22	34	42	42	42	..	35.8
Junction City	Maximum	48	46	56	65	70	71	72	69	69	70	61	60	75	48	46	55	69	69	60	58	63	59	41	37	40	42	53	49	54	53	..	57.6
	Minimum	22	27	22	25	28	30	31	29	33	33	33	47	42	39	31	31	27	34	32	25	37	38	28	16	17	16	34	42	42	43	..	31.1
Leitchfield	Maximum	50	46	56	65	70	70	71	73	71	70	58	64	55	50	44	59	65	71	55	59	64	58	39	32	44	39	43	48	52	52	..	56.4
	Minimum	23	28	24	27	32	32	33	37	38	35	46	48	39	39	34	27	30	38	36	25	34	37	29	21	14	18	32	42	41	40	..	32.6
Lexington	Maximum	44	46	53	61	65	67	66	62	66	66	62	57	42	53	42	43	63	64	47	52	58	51	30	29	34	38	44	44	55	51	..	51.8
	Minimum	29	30	31	42	46	50	43	37	49	50	53	42	39	34	30	33	38	41	29	33	39	30	22	16	21	22	33	40	43	40	..	36.2
Loretto	Maximum	50	46	56	65	69	70	..	..	..	..	..	..	..	..	..	..	69	69	66	56	65	62	60	33	43	40	43	50	54	55	..	j56.0
	Minimum	34	29	22	26	27	31	30	37	41	43	39	30	28	28	30	32	29	35	33	23	38	37	28	14	12	11	33	41	43	41	..	30.8
Louisville	Maximum	45	46	57	64	70	71	68	64	69	69	63	57	45	57	43	56	65	65	50	53	60	54	34	31	38	38	46	47	50	46	..	54.0
	Minimum	32	31	34	37	46	43	42	35	42	45	49	42	40	36	35	37	37	45	33	30	40	34	25	22	23	26	36	38	42	41	..	36.4
Do (Cherokee Park)	Maximum	45	37	56	62	67	69	64	63	68	68	62	58	50	55	54	53	64	64	63	54	60	58	40	31	37	37	43	46	51	49	..	54.3
	Minimum	27	29	29	23	31	33	34	31	35	36	42	47	39	31	33	31	31	39	29	25	34	37	27	19	17	17	33	38	38	42	..	32.1
St. John §§	Maximum	51	46	59	66	70	72	73	71	72	71	58	61	43	55	41	59	66	69	50	59	58	51	32	31	45	38	47	51	50	49	..	55.5
	Minimum	24	27	24	27	31	32	32	35	36	34	40	49	40	37	33	27	29	30	34	24	25	38	30	20	14	17	20	36	42	41	..	30.9
Scott	Maximum	41	56	59	62	69	71	63	59	65	68	60	55	45	53	46	61	64	64	55	53	58	55	35	33	37	36	40	41	48	47	..	53.3
	Minimum	29	29	29	31	32	38	36	30	34	40	38	43	39	36	30	33	33	44	26	24	36	34	25	14	14	20	32	35	36	42	..	32.1
Shelbyville §§	Maximum	47	47	58	67	71	71	70	66	69	71	60	58	44	58	41	52	65	66	51	57	62	50	32	32	36	39	44	45	50	46	..	54.2
	Minimum	25	28	27	28	29	34	32	32	33	33	34	47	40	29	28	29	29	32	29	23	28	32	29	15	15	15	20	35	40	42	..	29.7
Taylorsville	Maximum	47	44	55	62	65	69	66	65	65	67	60	57	54	55	48	53	64	66	58	55	61	58	38	31	38	38	42	46	52	49	..	54.3
	Minimum	25	34	25	25	28	29	29	31	31	31	34	48	42	35	27	29	26	32	32	21	29	38	29	14	15	14	35	41	42	43	..	30.5
Williamstown §§	Maximum	49	56	58	68	72	74	59	62	71	71	72	60	55	57	43	54	65	64	52	59	62	47	37	34	35	43	43	47	47	48	..	55.3
	Minimum	27	29	30	33	39	42	39	31	34	42	42	44	40	32	32	32	34	40	27	27	37	38	28	14	17	21	23	32	33	40	..	32.6
Eastern Division.																																	
Beattyville §§	Maximum	50	52	59	62	..	..	62	62	70	73	64	52	52	47	44	48	70	71	52	66	66	55	52	35	40	43	42	46	58	60	..	b54.
	Minimum	21	29	21	24	27	33	30	32	30	30	30	34	40	42	32	34	29	30	32	25	25	29	31	23	15	15	16	34	41	43	..	29.1
Berea	Maximum	47	47	59	62	73	75	71	66	70	72	65	59	51	45	42	56	72	76	58	63	63	49	37	35	39	41	42	48	56	56	..	56.
	Minimum	25	29	25	28	30	35	35	29	33	30	39	41	43	37	29	30	29	39	39	26	36	35	27	19	18	16	31	38	39	42	..	31.7
Larners	Maximum	40	50	58	67	70	70	63	62	68	70	63	57	47	52	49	44	62	65	53	56	57	58	41	38	38	40	42	46	46	48	..	54.
	Minimum	20	25	20	28	36	36	34	30	30	38	28	38	39	33	26	37	21	27	29	17	28	37	24	16	16	16	29	36	38	42	..	29.1
Maysville §§	Maximum	48	48	58	65	69	74	52	62	68	68	62	62	46	62	41	49	69	62	51	58	62	50	32	33	38	40	44	44	51	53	..	54.
	Minimum	27	28	26	27	30	30	30	31	29	30	32	25	41	32	28	27	27	27	28	21	23	35	29	19	18	18	19	32	35	39	..	28.
Middlesboro	Maximum	47	45	55	64	66	70	72	68	69	68	65	61	55	51	56	56	63	67	57	55	61	59	45	32	43	44	50	62	57	57	..	57.
	Minimum	24	33	23	24	27	32	28	30	31	30	30	41	41	46	45	28	29	29	34	32	28	44	28	23	15	15	36	47	45	47	..	32.
Mount Sterling §§	Maximum	45	47	54	63	66	70	65	60	67	68	63	56	48	52	39	41	64	66	48	57	63	50	30	36	35	38	44	43	50	56	..	52.
	Minimum	25	29	25	30	31	34	36	30	31	38	36	46	42	35	27	26	28	36	30	25	28	36	27	16	18	21	23	35	41	41	..	31.
Richmond §§	Maximum	44	44	50	63	67	71	69	60	66	68	60	55	47	42	38	48	66	60	51	60	60	48	31	20	39	41	41	40	48	46	..	51.
	Minimum	28	31	28	34	36	38	43	33	36	42	42	47	43	39	30	33	32	44	36	29	39	41	29	18	20	22	34	40	39	44	..	35.
Weeksbury	Maximum	50	45	55	64	66	68	69	64	66	68	70	61	54	50	57	47	65	68	67	61	67	58	58	31	40	40	15	50	56	59	..	57.
	Minimum	28	34	25	29	30	32	35	29	31	34	35	40	43	45	40	39	30	34	40	31	46	47	30	21	21	22	30	40	42	46	..	34.
Williamsburg §§	Maximum	50	48	57	64	68	70	72	69	68	65	70	57	50	45	49	56	68	70	54	60	68	53	35	35	44	45	54	58	61	60	..	57.
	Minimum	24	24	23	24	23	30	28	29	29	30	30	38	42	43	32	37	29	30	38	30	34	34	31	23	20	16	16	40	45	43	..	30.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
NO RAIN
0
0.5
1
2
4
6
8
Scale of Shades
1 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

ANNUAL, 1917

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 9, 1918

Climatological Data for the Year 1917.

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit). Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Precipitation (inches). Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall, unmelted.	Number of days With precip. of .01 in. or more.	Clear.	Pt. Cloudy.	Cloudy.	Prevailing direction of wind.
WESTERN DIVISION.																				
Beaver Dam	Ohio	441	15	53.3	96	June 12	−19	Dec. 10	15	44.50	7.67	Mar.	1.20	Sep.	48.2	94	169	80	116	s.
Blandville	Ballard	445	36	55.4	94	June 26	−10	Dec. 9	39	47.07	8.23	April	0.78	Sep.	42.6	94	125	136	104	sw.
Calhoun	McLean	437	14	54.9	98	Aug. 1	− 9	Dec. 9	15	43.15	6.33	April	0.89	Sep.	52.3	91	a112	a179	a73	sw.
Earlington	Hopkins	420	27	55.1	100	June 26†	−14	Dec. 9	28	39.95	5.92	April	1.47	Sep.	45.2	98	209	15	141	se.
Greenville	......	519	1	54.5	95	Aug. 4†	−12	Dec. 10	1	44.33	6.60	April	1.52	Sep.	42.8	92	......	......	......	......
Hopkinsville	Christian	524	21	56.1	95	July 31†	−13	Dec. 10	21	46.22	7.60	Jan.	1.33	Sep.	38.3	90	160	49	156	w.
Marion	Crittenden	571	19	......	96	June 26	−10	Dec. 30	18	......	6.20	April	......	......	......	......	......	......	......	......
Mayfield	......	......	8	......	96	June 26†	......	......	8	......	4.90	Jan.	0.45	Sep.	......	......	......	......	......	......
Owensboro	Daviess	479	21	53.6	95	June 26	−14	Dec. 9	21	35.95	5.22	April	1.48	Nov.	36.0	96	154	99	112	se.
Paducah	McCracken	341	......	57.3	100	Aug. 1†	−10	Dec. 9	29	47.39	7.55	April	0.70	Sep.	38.6	96	230	3	132	s.
Princeton	......	529	8	......	......	......	......	......	8	......	......	......	......	......	......	......	......	......	......	......
Russellville	......	590	5	53.4	94	Aug. 1	−13	Dec. 9	5	43.64	8.43	Jan.	0.60	Sep.	29.0	79	192	74	99	......
CENTRAL DIVISION.																				
Alpha	Clinton	811	24	54.5	90	June 26	− 7	Dec. 30	24	64.53	12.21	Mar.	0.30	Nov.	29.8	85	160	54	151	w.
Anchorage	Jefferson	700	17	51.6	96	June 26†	−20	Dec. 11	17	43.64	7.18	Mar.	1.55	Nov.	45.6	97	194	94	77	sw.
Bardstown	Nelson	637	21	53.4	98	Aug. 1†	−16	Dec. 30	21	41.63	7.25	April	1.45	Nov.	53.9	105	150	73	142	s.
Bowling Green	Warren	500	27	55.7	99	Aug. 1†	−10	Dec. 9	28	48.55	8.27	Jan.	1.18	Nov.	34.0	95	172	122	71	s.
Burnside	Pulaski	773	......	......	......	......	......	......	25	54.95	9.15	Mar.	0.38	Nov.	29.0	110	......	......	......	......
Carrollton	......	492	......	......	......	......	......	......	19	39.71	7.62	May	0.26	Nov.	......	115	......	......	......	......
Cloverport	Breckenridge	375	......	......	......	......	......	......	4	38.42	5.97	April	1.56	Aug.	42.3	120	......	......	......	......
Edmonton	Metcalfe	600	24	......	......	......	−12	Dec. 10	24	......	8.12	Mar.	......	......	......	......	......	......	......	......
Eubank	Pulaski	1,177	23	51.7	94	June 26	−10	Dec. 30	23	49.77	7.60	Mar.	0.74	Nov.	34.2	113	132a	73a	159a	s.
Frankfort	Franklin	560	25	52.4	95	June 26†	17	Dec. 11	28	49.14	8.16	July	1.24	Dec.	46.1	124	166	68	131	s.
Franklin	Simpson	691	22	......	93	June 26‡	......	......	22	......	......	......	......	......	......	......	......	......	......	......
Greensburg	Green	581	25	52.4	97	Aug. 1	−11	Dec. 30	29	49.95	8.51	Aug.	1.08	Nov.	42.0	118	84	97	184	s.
High Bridge	Jessamine	762	......	......	......	......	......	......	15	46.53	6.34	Jan.	1.21	Nov.	45.7	124	......	......	......	......
Irvington	Breckinridge	646	20	54.1	95	Aug. 1	− 9	Dec. 9†	20	38.40	7.09	April	1.77	Nov.	42.7	88	184	58	123	sw.
Junction City	Boyle	1,087	24	53.0	96	July 31†	−19	Dec. 30	24	55.44	9.60	Jan.	1.36	Nov.	52.5	139	169	106	90	sw.
Leitchfield	Grayson	635	22	53.6	95	June 26	−15	Dec. 9	22	46.70	7.48	April	1.97	Nov.	42.7	160	167	111	87	sw.
Lexington	Fayette	989	30	52.3	92	July 31†	− 9	Dec. 10	30	36.85	5.67	Jan.	1.03	Nov.	60.5	133	133	110	122	sw.
Loretto	Marion	681	19	......	100	July 31	−16	Dec. 12	19	46.87	8.38	Jan.	1.70	Nov.	59.2	113	153	114	98	......
LOUISVILLE	Jefferson	525	45	53.6	95	June 26†	− 6	Dec. 9	45	41.74	6.30	Mar.	1.35	Nov.	57.3	121	116	107	142	s.
Do (Cherokee Park)	Jefferson	534	8	52.5	93	Aug. 1	−12	Dec. 11	8	44.65	6.45	Jan.	1.57	Nov.	56.0	111	139	119	107	sw.
St. John	Hardin	777	21	52.0	96	June 26	−19	Dec. 10	21	45.50	6.99	Jan.	1.58	Nov.	53.3	124	229	51	85	......
Scott	Kenton	900	20	51.3	94	July 31†	−16	Dec. 11	20	37.85	5.97	Jan.	0.44	Nov.	38.7	124	113	117	135	s.
Shelbyville	Shelby	825	29	51.1	97	Aug. 20	16	Dec. 9	29	44.68	7.64	Mar.	1.34	Sep.	58.8	119	149	109	107	s.
Taylorsville	Spencer	489	15	52.1	95	June 25‡	−20	Dec. 11†	15	43.74	6.29	April	1.32	Nov.	51.4	119	145	75	145	s.
Williamstown	Grant	943	15	51.5	97	Aug. 20	10	Dec. 11	15	......	6.67	May	0.83	Nov.	39.4	118	164	69	132	......
EASTERN DIVISION.																				
Beattyville	Lee	650	14	......	......	......	19	Dec. 30	15	46.36	6.81	Mar.	0.70	Nov.	40.3	116	155	49	16	sw.
Berea	Madison	1,070	16	53.4	95	June 26	−21	Dec. 30	16	45.05	9.41	Mar.	0.83	Nov.	51.0	101	217	60	8	nw.
Catlettsburg	Boyd	534	......	......	......	......	......	......	29	44.33	7.29	Mar.	0.98	Nov.	......	103	......	......	......	......
Falmouth	Pendleton	600	......	......	......	......	......	......	29	41.31	5.42	Jan.	0.62	Nov.	36.5	109	154	80	131	......
Farmers	Rowan	668	10	52.1	96	July 1†	−20	Dec. 11	11	50.04	8.70	Mar.	1.13	Nov.	50.9	104	213	32	120	w.
Jackson	Breathitt	776	......	......	......	......	......	......	6	54.43	6.93	Mar.	0.72	Nov.	33.5	92	......	......	......	......
London	Laurel	1190	......	......	......	......	......	......	3	50.69	9.37	Mar.	0.92	Nov.	......	120	......	......	......	......
Louisa	Lawrence	584	......	......	......	......	......	......	14	......	......	......	0.84	Nov.	......	......	......	......	......	......
Manchester	Clay	1400	......	......	......	......	......	......	8	40.85	8.03	Mar.	0.15	Nov.	34.0	85	......	......	......	......
Maysville	Mason	524	20	51.1	98	Aug. 1†	−20	Dec. 11	20	41.61	5.97	July	0.84	Nov.	53.9	120	166	87	112	e.
Middlesboro	Bell	1,128	21	54.3	93	June 26	−19	Dec. 30	21	55.50	13.39	Mar.	0.36	Nov.	......	122	183	147	35	......
Mount Sterling	Montgomery	930	28	51.1	95	June 26	−18	Dec. 11	28	51.18	7.41	Jan.	1.21	Nov.	66.8	122	188	54	123	sw.
Pikeville	Pike	634	......	......	......	......	......	......	12	52.71	10.40	Mar.	0.50	Nov.	21.5	107	......	......	......	......
Richmond	Madison	926	23	53.1	95	Aug. 1	− 9	Dec. 10	25	44.95	7.96	Jan.	1.10	Nov.	61.2	117	161	73	132	......
Weeksbury	Floyd	1,216	1	54.7	95	June 26	−12	Dec. 30	1	......	......	......	0.97	Nov.	......	99	173	91	101	......
Williamsburg	Whitley	939	20	54.3	95	June 26†	−15	Dec. 30	22	52.50	11.07	Mar.	0.45	Nov.	26.0	127	141	68	156	s.

All temperature data are taken from self-registering thermometers.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents 2 days, etc.

† Also on other dates.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXII. LOUISVILLE, KY., ANNUAL, 1917. No. 13

GENERAL SUMMARY.

The average temperature of the State for the year 1917 was nearly 1 lower than for any other year since State records began in 1889. The average temperature of every month, except January, was below normal The months of May, October, and December were the coldest by far of any corresponding months of the 29 years covered by State records, or of the 45 years covered by the records of the Louisville station. The unusually low temperatures of May and October shortened decidedly the growing season; besides the cold weather prevailing throughout the entire growing season retarded the development and maturing of crops. But despite these adverse conditions of temperature and the unusually wet weather, lack of sunshine, and water-soaked condition of the soil during March, and much of April, May and June, large and excellent crops, except wheat, were produced. Wheat was protected by snow during the cold weather of January, but suffered greatly from the cold of February, when there was no snow covering. It was harvested, however, under excellent conditions in early July. Corn was greatly delayed in planting, much of it having to be replanted on account of not germinating. It also had to be cut early in October, much of it sappy, but dried out well during the long period of dry weather in November. Tobacco was planted late and cut early, but a good crop was grown.

The most favorable period of the entire growing season was the last week of July and first week of August. Good progress was made with fall plowing and seeding, but germination and growth were retarded by the cold weather of October and the dry weather of November. Good rains, however, at the end of November were productive of great improvement, especially to wheat, as were the heavy snows of December. Rainfall during the summer growing season, on account of favorable distribution, was generally ample, timely rains coming to break droughty conditions appearing in any district. The unusual frequency of thunderstorms in January, February and March, and the many destructive wind and hail storms in May were noteworthy features.

THE WEATHER BY MONTHS.

JANUARY.—Heavy snow and much cold weather characterized conditions prevailing during the month, although the temperaure for the month averaged above normal. Mild weather prevailed during the first decade and during the latter part of the month, while a period of severe cold weather beginning about he 10th, continued with varying intensity until the 20th. The ground was covered with snow during this period, which was of great benefit to wheat. The snow was carried off by the high emperature and rains about the 21st. Several hard, spewing reezes occurred after the snow covering disappeared and while he ground was saturated with water, damaging wheat. Thunderstorms were quite general on the 27th and 31st.

FEBRUARY.—The first two weeks were remarkably cold, several cold waves and one blizzard occurring in that period. The blizzard of the 4th was particularly memorable, and the cold weather coming without snow covering was quite destructive to wheat. There was little or no snow protection during the cold weather. Livestock interests suffered considerable loss from cold weather, especially in young lambs.

MARCH.—The weather during March was characterized by many storms, high winds, lack of sunshine, and excessive precipitation over the State. March records for precipitation were broken at a number of stations. The soil was water-soaked practically all of the month. The continued wet weather made difficult the sowing of tobacco plant beds, and delayed farming operations in general, outdoor work being from one to two weeks behind at the end of the month. Wheat improved during the month, but other vegetation made little or no advancement.

APRIL.—Cold, wet weather prevailed during the first half of the month. Low night temperatures, frequent freezes, and water-soaked soil prevented the development of vegetation. During the last half of the month conditions were decidedly favorable for farm work, and rapid progress was made in the preparation of soil and planting of gardens. By the end of the month considerable progress had been made in corn planting in the southern counties.

MAY.—Temperature conditions that prevailed during the first two weeks of this month surpass all records for cold weather in May in this State. Showers were frequent, and the sky was almost continuously overcast during this period. Light frost occurred on several dates, probably most generally on the 14th, but no damage of consequence occurred because of cloudiness and wind. Considered in all its phases the weather during this month was exceptionally unfavorable for farming and gardening operations.

JUNE.—Continuous rains during the first decade and temperatures generally below normal during the first three weeks produced conditions unfavorable for the growth of vegetation. The cool, wet weather, however, was favorable for transplanting tobacco. During the last two weeks the soil was dry enough for general cultivation; and with favorable temperatures and good showers the field crops developed rapidly. Farm work was well in hand at the end of the month and the crops in promising condition, though still somewhat backward and late.

JULY.—During the first three weeks there were only a few days of real July weather with temperatures favorable for the growth of corn. The nights during this period were abnormally cool. The last week, however, was decidedly favorable and crops, especially corn, made rapid growth. The month closed with crops in excellent condition.

AUGUST.—Warm weather prevailing at the close of July continued through the first week of August, producing the most favorable growing period of the season. At the close of the month good growing conditions prevailed, and farmers were making excellent progress with fall plowing.

SEPTEMBER.—During the first decade temperatures were seasonable, rainfall was sufficient, and crops made good progress. From the 10th to 12th there was unusually cold weather, with light frosts. The month was particularly favorable for cutting and housing tobacco, and for plowing and seeding for fall grain, though the latter work was somewhat hindered by dryness of soil toward the end of the month.

OCTOBER.—This was the coldest October since the weather service for the State was established in 1889. Except for a few days near the middle of the month, temperatures were almost continuously below normal. Killing frosts occurred in the east-central counties on the 7th, and generally over the State on the 8th, causing considerable damage to late crops of corn, tobacco, tomatoes, and potatoes. The damage was a resultant more of the

Highest Monthly Temperatures for the Year 1917, with Dates.

Stations.	January.		February.		March.		April.		May.		June		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
WESTERN DIVISION.																								
Beaver Dam	69	31	76	25	80	31	88	19	88	16	96	12	94	31	93	1	88	1†	88	17	74	8	68	2
Blandville	70	31	76	26	80	31	83	18	85	31	94	26	93	1	92	4	88	2	84	17	74	7	71	2
Calhoun	68	29†	75	26	79	31	87	24	86	19	97	26	97	31	98	1	93	6	87	17	74	7†	68	2
Earlington	71	29	75	25†	81	31	88	18†	90	31	100	26	99	31	100	4†	97	1	89	17	78	9	71	2
Greenville	70	31	70	27	74d	11†	85	17†	85c	19†	93c	24†	93	31	95a	4†	91	1	87a	17	74c	6†	70	2
Hopkinsville	71	29	77	26	80	31	86	18†	86	19†	94	25†	95	31	95	1	90	16	86	16	74	5†	71	2
Marion	67	30†	75	26	80	31	84	18	89	27	96	26	94	1	95	5	94	3	87	17	......	......	......	......
Mayfield	69	4†	75	27	79	31	84	18	86	19†	96	26	95	14	96	5	92	1†	86	17	76	7†	......	......
Owensboro	67	31	74	25	79	31	86	18	86	19	95	26	93	1†	94	1†	90	2	86	17	72	5†	61	2
Paducah	72	31	77	26	80	31	86	18	89	27	94	23†	98	29†	100	1†	98	5†	90	17†	77	8	72	2
Princeton	70	31b	76	26	80b	31	86	18†	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Russellville	66	28†	80	26	78	31	87	24	85	18†	90d	28	93	7†	94	1	93	7	86	17	74	9†	70	2
CENTRAL DIVISION.																								
Alpha	69	29	72	25	77	31	83	19	83	19	90	26	90	14	89	1	83	6	79	17	71	6†	66	2
Anchorage	66	30	71	26	80	31	85	18	87	19†	96	26	94	1†	96	1†	91	2	83	17	72	5	61	2
Bardstown	67	29	75	25	81	31	88	18	90	20	97	25†	97	31	98	1†	92	2	88	17	76	7	65	2
Bowling Green	71	30	78	26	82	31	90	18	92	18†	97	25	97a	1†	99b	1	94	6	90	17	72	9	70	2
Edmonton	66	5	76	25	80	31	87	18†	85	19†	93a	26	......	......	94	1	89	16	84j	17	73	7†	63	4
Eubank	68	29b	74	26	78	31	84	18	85	19†	94	26	92	31	93a	1†	89	2	83	17	71	6†	65	2
Frankfort	67	31	74	26	79	31	85	18	86	19	95	26	95	31	95	1	89	2†	81	17	67	6	60	2
Franklin	68	29	76	26	79	31	86	27	86	19†	93	26	92	31	93	1	......	......	......	......	......	......	......	......
Greensburg	69	29	76	26	79	31	86	18	87	20	95	26	95	31	97	1	87	2†	83	17	72	6†	63	2
Irvington	66	29	74	26	79	31	84	18	85	19†	92	25†	94	31	95	1	89	6	83	17	69	6	65	2
Junction City	68	31	74	26	80	31	86	18	87	20	93	26	96	31	96	1	89	1	85	17	75	13	68	2
Leitchfield	67	29	75	26	80	31	86	18	87	19	95	26	94	31	94	1†	88	3†	84	17	73	8	67	2
Lexington	65	31	71	26	78	31	83	18	84	19	91	29	92	31	92	1	86	1	82	17	67	6	60	2
Loretto	69	29b	75	25†	83	31	86	18	90	22	94	26	100	31	97	1	93	6	86	18	70j	6	65	2
LOUISVILLE	64	31	73	26	78	31	86	18	87	19	95	26	94	31	95	1	90	2	83	17	71	6	60	2
Do (Cherokee Park)	65	29†	73	26	80	31	88	18	89	19	91	26	92	31	93	1	86	1†	81	17	69	6	60	2
St. John	69	2	74	26	78	31	85	18	86	19	96	26	94	31	95	1	90	3†	84	17	73	7	65	2
Scott	66	31	70	26	79	31	87	18	86	20	92	26	94	31	94	1†	90	2	81	17	71	6	54	3
Shelbyville	64	29	73	26	79	31	86	18	88	19	95	26	95	31	97	20	90b	2	85	17	71	5†	62	2
Taylorsville	65	29†	75	26	79	31	85	18	88	19†	95	25	94	31	95	1	87	2†	81	17	69	6	61	2
Williamstown	66	31	71	26	78	31	86	18	86	18	93	26	94	31	97	20	91	2	85	17	74	6	55	2
EASTERN DIVISION.																								
Beattyville	74	29†	77	26	84	31	90	18	91	20	93	13†	95	1	......	......	88	26	89	18	73	10	65	2
Berea	70	31	75	26	79	30†	87	18	88	20	95	26	94	31	94	1	88	3	86	18	76	18	65	3
Farmers	67	31	78	26	80	31	86	18†	90	20†	95	28†	96	1	96	20	89	1†	86	17†	70	5†	68	3
Maysville	70	31	72	26	81	31	89	18	90	19†	97	26	97	31	98	1†	93	2	85	17	74	6	56	3
Middlesboro	70	29	69	26	76	31	86	18	88	27	93	26	90	8†	90	1	87	8	84	18	72	7	60	2
Mount Sterling	69	31	75	26	79	31	85	18†	86	19†	95	26	94	31	94	1	89	6	84	17	70	6	57	3
Richmond	72	29	70	26	80	31	86	18†	92	18	94	26	94	31	95	1	89	15	83	17	71	6	58	2
Weeksbury	72	30	76	26	80	31	89	18†	89d	19†	95	26	94	29	92	1	90	2	86	17	70	11	62	3
Williamsburg	71	29†	75	26	80	13†	88	18	89	19†	95	26	95	31	94	1	89	6	87	17	72	7	64	2

† Also on other dates.

cold and backward season than of the earliness of the frost. The unseasonably low temperature of the month retarded the germination and growth of fall grains, which made slow progress. Some tobacco was frozen in barns.

NOVEMBER.—The temperature averaged somewhat below normal, and precipitation was only a little more than one-third of the normal amount, nearly all of it occurring during the last four days of the month. A long period of dry weather enabled corn, which was somewhat sappy, to dry out thoroughly. Tobacco cured out well, but was too dry to handle until the last few days.

DECEMBER.—This month averaged by far the coldest of any December since State records were established in 1889. There were two distinct periods when temperatures registered below zero. While extreme temperatures have been lower once or twice in the past, in no other December of record were there so many days with minimum temperature below zero. During the entire time of extreme cold weather, however, the ground was covered with snow, which protected wheat and other winter crops; also the melting of the snow furnished much needed moisture. The snowfall was not only considerably greater than for any other December, averaging 17.3 inches for the State, but the greatest for any month of record in this State.

ERRATA—Monthly Reports. March, 1917—Eubank, total precipitation should be 3.13 inches. October, 1917—Williamsburg, maximum temperature should be 87.

MONTHLY SUMMARIES, 1917.

MONTH.	Temperature.				Precipitation.		Average number of days.			
	State average.	*Departure.	Highest.	Lowest.	State average.	*Departure.	With .01 or more rain.	Clear.	Partly cloudy.	Cloudy.
January	36.7	+ 1.3	74	−17	6.38	+ 2.16	12	8	8	15
February	34.8	- 0.6	80	− 9	3.51	− 0.23	8	9	8	11
March	45.9	- 0.4	84	0	6.52	+ 1.63	14	13	6	12
April	55.8	0.1	90	19	5.02	+ 0.95	8	14	7	9
May	58.9	− 6.8	92	30	3.43	− 0.49	10	12	8	11
June	70.9	− 3.0	100	39	4.30	+ 0.08	10	15	9	6
July	75.3	1.5	100	50	4.38	+ 0.03	11	12	10	9
August	73.9	− 1.8	100	42	3.49	+ 0.14	8	16	8	7
September	67.7	− 2.9	98	34	2.56	− 0.14	5	18	7	5
October	51.1	− 6.6	90	20	3.18	+ 0.90	7	14	8	9
November	44.3	− 1.7	78	11	1.23	− 2.36	5	14	5	11
December	26.5	−11.0	72	−21	2.01	− 1.78	8	10	7	14
Annual means and extremes	53.5	2.9	100	21	46.01	+ 0.89	106	155	91	119

Lowest Monthly Temperatures for the Year 1917, with Dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August		September		October		November		December	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
WESTERN DIVISION.																								
Beaver Dam	-9	14	1	2	15	5	29	9	36	14	39	16	50	4	46	26	38	12	21	13	18	25	-19	14
Blandville	-2	14	3	2	12	5	30	9	40	5‡	43	16	58	4	54	26	41	11	27	30	21	24	-10	9
Calhoun	-3	14	4	2	13	5	28	9	36	12	40	16	56	4	50	26	39	12	24	13	17	25	-9	9
Earlington	-3	14	-3	2	15	5	30	3†	35	8†	40	16	56	3†	49	26	39	12	25	13	17	25	-11	9
Greenville	-6	14	-2	2	13[d]	5[j]	29	10	36[e]	14	42[e]	19	57	3†	48[a]	26	39	12	25[a]	20	17	25	-12	14
Hopkinsville	-6	14	0	2	12	5	31	10	38	8†	41	16	59	3	51	26	43	12	27	13†	20	25	-13	10
Marion	0	15	-5	2	10	5	29[f]	9	38	8	42	15	58[e]	5	48	26	......	...	27	30			-10	10
Mayfield	-10	14	-2	3	9	5	30	3†	38	8	42	16	58	3†	50	26	38	12	23	13	25	25		
Owensboro	6	14	-2	2	16	5	30	9	38	23	46	16	60	11†	51	26	46	11†	26	13	19	25	-14	9
Paducah	2	14	-3	2	11	5	31	9	39	8	43	16	59	16	54	26	42	11	28	30	18	24	-10	9
Princeton	9	14[h]	5	3	22[h]	19	30	3†	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Russellville	4	18[f]	2	3	16	5	29	9†	35	14	42	16	56	11	46	26	40	12	26	13†	17	25	-13	9
CENTRAL DIVISION.																								
Alpha	10	12†	3	3	6	6	31	9†	33	9	42	16	54	13	50	26	42	12	29	13†	18	25	7	30
Anchorage	15	14	-5	5	8	6	21	9	33	14	40	16	52	4‡	47	25‡	36	30	23	30†	11	24	-20	11
Bardstown	6	14	2	5	13	6	25	9	33	14	42	16†	53	3	46	26	38	12	20	24	13	25	-16	30
Bowling Green	-2	14	0	3	13	6	29	9†	38	14	42	16	56a	13	49	26	42	11	26	20	18	25	-10	9
Edmonton	3	14	0	2†	5	6	28	10	33	14	42[a]	16	....	...	52	25	39	12	24	31	15	25	-12	10
Eubank	2	14†	-6	12	4	6	25	10	31	11	40	16†	51	13	44[a]	26	38	12	22	31	14	25	-10	30
Frankfort	-6	14	-5	5	11	6	24	9	35	14	42	16	55	11	54	18†	40	12	27	31	17	26	-17	11
Franklin	2	14	1	2	16	5	28	9	38	8	43	16	61	3†	51	26	.....	...	....	...	...	...	....	...
Greensburg	5	14	0	3†	5	6	27	10	32	14	40	17	50	13	45	26	38	12	21	24	14	25†	11	30
Irvington	4	14	-4	2	17	5	27	9	38	23	43	16	59	4	51	26	43	11	27	24	18	25	-9	9†
Junction City	-9	14	-3	5	4	6	24	10	35	6	39	17	50	13	42	26†	36	12	20	31	16	24†	-19	30
Leitchfield	11	14	3	2	13	6	27	9	38	8†	42	16	56	3	48	26	42	11†	25	20†	14	25	-15	9
Lexington	4	14	-7	5	15	6	22	9	35	5	43	16	58	11	56	25	42	11	25	30	16	24	-9	10
Loretto	-7	18	-2	5	10	6	26	9	33	8	40	16†	53	3	45	26	34	30	22	31	11†	26	-16	12
LOUISVILLE	5	14	-4	2†	16	6	26	9	38	4	46	16	60	4	55	26	44	11	27	30	22	24	-6	9
Do (Cherokee Park)	-8	14	-5	5	9	6	22	9	37	12	43	16	55	4	50	26	42	11†	26	20	17	25‡	-12	11
St. John	16	15	-2	5	10	6	26	9	32	2	41	16	54	13	42	26	41	11†	23	24	14	25	-19	10
Scott	-6	14	-8	5	9	6	21	9	34	10	43	16†	53	11	52	26	39	11	27	31	14	24†	-16	11
Shelbyville	-10	14	-5	5	9	6	19	9	35	2	40	16	52	11	48	26	39	12	23	31	15	24†	-16	9
Taylorsville	-17	14	-3	5	5	6	24	9	35	14†	41	16†	52	13	47	26	38	12	24	31	14	24†	20	11†
Williamstown	-4	14	7	5	8	6	20	9	35	5	43	16	54	11	53	26	39	11	25	31	14	24	-10	11
EASTERN DIVISION.																								
Beattyville	4	12	-2	5	3	6	24	10	30	14	42	16	54	12†	46	26	36b	30	20	31	15	25†	-19	30
Berea	1	14	-3	5	12	6	25	10	33	14	39	16	54	13	45	26	36	12	22	31	16	26	-21	30
Farmers	-7	14	9	5	3	6	21	7	31	12†	40	17	51	13	45	25‡	37[a]	11	20	31	16	24†	-20	11
Maysville	-3	15	-8	5	4	6	22	9	32	10	42	17	54	3†	46	26	38	11	25	31	18	25†	-20	11
Middlesboro	7	12	-1	4	15	6	27	10	32	14	42	17	54	11	49	26	41	11	22	31	15	25‡	-19	30
Mount Sterling	6	14	6	5	0	6	23	9	36	8	41	16	54	11†	46	26	38	12	22	31	16	24	-18	11
Richmond	2	14	0	2	11	6	25	9	37	5†	42	16	57	11	50	26	40	11	24	31	18	24	-9	10
Weeksbury	10	12	-3	5	12	5	28	14	36[d]	14	41	17	55	11	43	18	42	11†	29	13†	21	24†	-12	30
Williamsburg	10	14	0	3†	11	6	28	10	35	14	41	17	53	11	49	27	39	11	23	31	16	26†	-15	30

† Also on other dates.

COMPARATIVE ANNUAL DATA FOR KENTUCKY.

Year.	Temperature. Mean.	*Departure.	Highest.	Lowest.	Precipitation. Average.	*Departure.
89	55.6	−0.8	101	3	35.97	− 9.15
90	57.1	+0.7	101	4	58.82	+13.70
91	56.3	−0.1	105	0	49.69	+ 4.57
92	55.3	−1.1	101	− 6	44.25	− 0.87
93	55.5	−0.9	101	−22	44.71	− 0.41
94	57.1	+0.7	105	−12	34.81	−10.31
95	55.0	−1.4	104	−18	38.47	− 6.65
96	57.6	+1.2	106	−12	44.68	− 0.44
97	57.2	+0.8	107	−16	46.72	+ 1.60
98	57.2	+0.8	103	−12	52.38	+ 7.26
99	56.4	0.0	105	−33	46.38	+ 1.26
00	57.7	+1.3	104	− 9	44.40	− 0.72
01	55.3	−1.1	112	−22	35.65	− 9.47
02	56.5	+0.1	107	− 3	44.35	− 0.77
03	55.8	−0.6	104	−16	41.16	− 3.96
04	55.3	−1.1	100	− 9	35.10	−10.02
05	55.8	−0.6	106	−16	47.68	+ 2.56
06	57.0	−0.6	100	−12	48.84	+ 3.72
07	56.1	−0.3	102	−11	47.76	+ 2.64
08	57.7	+1.3	104	2	41.94	− 3.18
09	56.5	+0.1	104	−14	51.36	+ 6.24
10	55.3	−1.1	100	−20	50.67	+ 5.55
11	58.0	+1.6	106	−16	46.77	+ 1.65
12	54.6	−1.8	100	−20	47.93	+ 2.81
3	57.9	+1.5	109	− 2	47.46	+ 2.34
4	56.3	−0.1	109	−16	41.80	− 3.32
5	56.2	−0.2	102	0	51.92	+ 6.80
6	56.2	−0.2	102	−14	45.49	+ 0.37
7	53.5	−2.9	100	21	46.01	+ 0.89

*Compared with 25 years' normal

KILLING FROSTS, 1917.

STATIONS.	Last in Spring.	First in Autumn.	STATIONS.	Last in Spring.	First in Autumn.
WESTERN DIVISON			Irvington	April 14	Oct. 9
Beaver Dam	April 14	Oct. 9	Junction City	do 15	do 7
Blandville	do 14	do 9	Leitchfield	do 14	do 9
Calhoun	do 14	do 9	Lexington	do 14	do 9
Earlington	do 14	do 9	Loretto	do 14	do 7
Greenville	do 14	do 9	Louisville	do 14	do 9
Hopkinsville	do 14	do 9	Cherokee Park	do 14	do 9
Marion	....	do 9	St. John	do 14	do 9
Mayfield	do 14	do 9	Scott	do 16	do 9
Owensboro	do 14	do 9	Shelbyville	do 14	do 9
Paducah	do 14	do 9	Taylorsville	do 14	do 6
Princeton	do 14	do 9	Williamstown	do 14	do 9
Russelville	do 14	do 9			
CENTRAL DIVISON			EASTERN DIVISON		
Alpha	April 15	do 7	Beattyville	April 15	do 9
Anchorage	do 14	do 6	Berea	do 15	do 7
Bardstown	do 14	do 7	Farmers	do 15	do 7
Bowling Green	do 14	do 7	Maysville	do 16	do 9
Edmonton	do 14	do 7	Middlesboro	do 15	do 7
Eubank	do 15	do 7	Mount Sterling	do 15	do 7
Frankfort	do 14	do 9	Richmond	do 14	do 9
Franklin	do 14	....	Weeksbury	do 16	do 7
Greensburg	do 14	do 7	Williamsburg	do 15	do 7

Monthly and Annual Precipitation for the Year 1917, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
WESTERN DIVISION.																										
Beaver Dam	4.95	-0.51	2.15	-1.67	7.67	+3.33	7.22	+3.11	2.37	1.41	3.10	-0.33	4.93	+0.54	4.35	-1.01	1.20	-1.32	2.37	-0.07	1.79	-1.07	2.40	1.55	44.50	+1.08
Blandville	5.13	0.72	2.75	2.01	5.33	+0.46	8.23	+4.04	2.75	1.78	3.46	1.37	5.96	+2.07	5.97	+2.95	0.78	-2.20	1.77	-0.96	2.89	-1.18	2.05	-1.88	47.07	1.04
Calhoun	6.32	+1.42	2.38	-1.44	4.64	+0.02	6.33	+1.49	3.38	0.60	5.52	+1.89	2.17	-2.42	4.55	+1.19	0.89	-1.71	2.77	0.51	2.00	-1.11	2.20	-1.97	43.15	-3.15
Earlington	5.10	+0.97	2.58	1.42	5.92	+0.41	5.35	+1.03	2.26	-2.75	3.68	-0.15	3.51	0.79	2.46	-0.86	1.47	-1.58	2.56	+0.32	2.37	-2.01	2.69	-1.17	39.95	7.70
Greenville	5.11	.....	3.66	.....	6.39	.....	6.60	.....	2.65	.....	4.81	.....	3.51	.....	3.67	.....	1.52	.....	3.13	.....	1.90	.....	1.98	.....	44.33	.....
Hopkinsville	7.60	+2.47	4.05	+0.16	5.63	+0.79	6.20	+1.85	2.82	-1.41	3.35	-0.93	5.96	+1.93	2.40	-0.65	1.33	-1.70	2.68	-0.19	1.80	-2.35	2.40	-2.37	46.22	-2.40
Marion	5.63	+0.83	1.77	1.60	4.37	0.42	6.20	+1.62	3.15	1.14	5.48	+1.83	4.86	+0.93	3.53	0.74	2.42	-0.62	1.23	-1.31	.....	.....	.....	.....	.....	.....
Mayfield	4.90	.....	2.00	.....	3.99	.....	4.88	+0.74	2.91	-1.44	.....	.....	3.74	-0.91	3.29	+0.05	0.45	-2.38	2.95	+0.40	2.48	.....	.....	.....	.....	.....
Owensboro	5.07	+0.56	2.40	0.85	2.63	2.15	5.22	+1.12	4.71	+0.90	2.59	-0.98	2.47	-1.38	1.62	-1.97	2.67	-0.15	3.28	+0.18	1.48	-1.97	1.78	-2.08	35.95	-8.77
Paducah	6.34	+2.08	2.51	-1.19	5.97	+1.27	7.55	+3.50	3.26	-0.71	5.44	+0.53	5.04	-1.10	3.25	+0.29	0.70	-2.29	2.20	-0.22	2.42	-1.92	2.71	-1.07	47.39	+1.37
Princeton	5.20	+1.05	2.90	-2.16	5.96	-0.71	5.30	+1.73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Russellville	8.13	.....	3.04	.....	4.71	.....	4.19	.....	2.63	.....	4.37	.....	7.68	.....	2.11	-0.42	0.60	-2.48	2.88	.....	1.07	.....	1.93	.....	43.64	.....
CENTRAL DIVISION.																										
Alpha	7.07	+2.22	8.20	+3.70	12.21	6.04	7.02	+1.75	2.33	-1.55	5.45	+0.41	8.15	+2.45	5.35	+1.02	3.45	+0.29	2.50	+0.07	0.30	-3.43	2.50	-2.24	64.53	+10.73
Anchorage	6.26	2.60	2.18	-0.96	7.18	+3.20	5.61	+1.63	4.35	+0.62	3.65	0.00	3.50	-1.00	1.91	1.67	1.62	-1.19	3.57	+0.71	1.55	-1.42	2.26	-1.74	43.64	+0.78
Bardstown	6.74	+1.91	2.85	1.06	3.88	0.81	7.25	+3.38	3.32	-0.21	3.74	-0.60	2.68	-1.80	4.18	+0.57	2.02	-0.88	2.65	-0.35	1.45	-1.93	1.47	-2.89	41.63	-4.67
Bowling Green	8.27	+3.63	5.16	+1.01	6.89	1.97	5.66	+1.40	3.00	1.08	3.45	-0.42	4.51	+0.05	3.08	0.41	2.09	-1.04	3.13	+0.76	1.18	-2.43	2.13	-2.19	43.55	+1.22
Brownsville	...	.....	4.07	.....	7.47	.....	6.41	.....	2.54	.....	6.62	.....	4.96	.....	4.38	.....	2.53	.....	2.87	.....	1.31	.....	2.12	.....	.....	.....
Burnside	7.71	+3.96	6.01	+1.75	9.15	+3.88	4.85	+0.90	2.75	1.32	3.83	-0.55	5.99	+1.06	4.24	-0.13	3.81	+0.55	4.30	+2.00	0.38	-3.29	1.93	-2.12	54.95	+6.95
Carrollton	5.27	.....	2.08	.....	3.13	.....	3.68	+0.50	7.62	+3.63	5.50	+2.20	2.55	-0.88	1.76	0.67	3.16	+0.33	3.20	+0.55	0.26	-2.67	1.50	-1.50	39.71	+2.15
Cloverport	5.35	.....	2.01	...	3.73	....	5.97	.....	4.01	.....	4.19	.....	2.37	.....	1.56	.....	2.64	.....	3.03	.....	1.77	.....	1.79	.....	38.42	.....
Edmonton	7.36	+3.31	3.68	0.73	8.12	+2.29	3.48	-0.62	2.84	-1.58	4.48	+0.21	.....	.....	6.46	+3.07	2.32	-1.03	....	.....	.....	.....	3.08	-1.19	.....	.....
Eubank	7.30	3.33	4.68	+0.59	7.60	-2.35	3.61	-0.41	3.09	0.86	3.92	0.16	4.12	-0.51	6.34	+2.39	2.78	-0.74	3.61	+1.47	0.74	-2.29	1.95	-1.47	49.77	+3.69
Frankfort	5.95	+2.33	2.66	-0.96	7.23	+1.96	6.16	+2.43	4.57	+0.76	3.98	-0.14	8.16	+4.19	3.71	+0.29	1.27	-1.57	2.88	+0.93	1.33	-2.08	1.21	-2.12	49.14	+7.18
Franklin	7.36	+3.76	4.04	0.85	7.13	+2.38	5.86	+1.25	2.70	-1.35	5.01	+1.04	7.67	+3.56	2.72	-0.58	....	.....	...	.....	.....	.....	.....	.....	.....	.....
Greensburg	7.71	3.68	4.60	+0.47	6.94	+1.44	4.48	+0.82	2.70	-1.22	3.42	1.11	2.87	-1.82	8.51	+4.87	2.81	-0.16	3.15	+0.83	1.08	-2.60	1.68	-2.48	49.95	+2.72
High Bridge	6.34	+2.10	2.91	0.55	5.82	-1.61	5.26	+1.57	2.82	1.06	5.53	+1.54	5.15	+0.63	4.23	+0.36	2.48	-0.40	2.58	+0.11	1.21	-1.50	2.20	-2.20	46.53	+2.27
Irvington	4.87	0.42	2.47	-0.86	4.71	+0.11	7.09	+3.07	2.51	-0.90	3.85	-0.14	2.54	-1.01	2.52	-1.08	1.79	-1.20	2.45	0.30	1.77	-1.44	1.83	-2.07	38.40	-5.40
Junction City	9.60	+5.18	5.86	+2.23	7.93	+2.82	5.82	+2.11	2.96	-0.85	4.80	+0.98	4.20	-0.03	4.49	+1.36	2.73	-0.29	3.65	+1.66	1.36	-1.78	2.10	-2.13	55.44	+11.26
Leitchfield	7.46	+2.94	3.07	-0.71	6.57	+1.78	7.48	+3.40	2.27	-1.73	2.91	-1.08	2.97	-1.17	4.51	+0.84	2.50	-1.14	2.97	+0.54	1.97	-1.96	2.02	-2.60	46.70	0.89
Lexington	5.67	+1.84	2.12	1.11	5.48	0.76	3.97	+0.63	3.51	0.01	3.54	-0.45	2.80	-1.64	1.94	-1.63	2.46	+0.04	2.36	+0.14	1.03	-2.45	1.97	-1.35	36.85	-5.23
Loretto	8.38	+3.67	4.58	+1.53	4.72	0.16	6.28	+2.57	2.04	-1.83	4.80	+0.32	4.00	-0.20	3.10	-0.56	1.85	-1.02	3.42	+0.98	1.70	-1.26	2.60	-2.28	46.87	+2.02
LOUISVILLE	6.12	+2.22	2.55	1.20	6.30	+1.98	4.93	-0.86	4.39	+0.75	3.18	-1.05	1.86	1.88	4.05	-0.51	2.27	-0.36	2.46	0.17	1.35	-2.83	2.28	-1.45	41.74	2.59
Do (Cherokee Park)	6.45	....	2.77	....	6.30	.....	5.19	.....	5.38	....	4.18	.....	2.38	.....	2.04	.....	2.82	.....	2.75	.....	1.57	.....	2.82	.....	44.65	.....
St. John	6.99	2.42	3.14	-0.84	4.63	-0.36	6.04	+2.17	3.08	0.90	2.85	-1.15	5.93	+2.38	3.38	-0.25	2.33	-0.79	3.17	+0.68	1.58	-1.90	2.38	-2.04	45.50	0.58
Scott	5.97	1.88	1.62	1.13	3.81	-0.63	4.41	+1.23	3.84	-0.22	3.79	+0.11	3.07	-0.27	2.08	-1.46	4.19	+1.64	3.49	+1.15	0.44	-2.36	1.11	-2.07	37.85	-2.13
Shelbyville	6.06	2.05	2.91	-0.69	7.64	-2.93	5.93	+2.21	4.21	+0.20	3.56	-1.14	4.57	+0.37	2.40	-0.63	1.34	-1.55	2.18	+0.65	1.38	-2.57	2.50	-1.16	44.68	+0.11
Taylorsville	4.63	-0.06	2.67	1.16	4.73	+0.39	6.29	+1.82	4.79	+1.32	2.72	-1.81	4.66	+0.02	4.36	+0.64	2.65	-0.80	2.91	+0.36	1.32	-1.78	2.01	-2.41	43.74	-3.41
Williamstown	5.77	1.90	2.17	-0.80	4.44	-0.28	4.07	+0.97	6.67	+3.12	4.94	+1.21	2.56	-1.50	3.13	-1.01	1.43	-1.66	...	.....	0.83	-1.51	1.52	-2.08	.....	.....
Woodbury	...	.....	3.35	.....	6.28	....	5.19	.....	2.27	.....	4.97	.....	5.57	.....	2.11	.....	2.33	.....	2.95	.....	1.37	.....	1.76	.....	.....	.....
EASTERN DIVISION.																										
Beattyville	5.51	+0.88	4.96	+0.80	6.81	+1.48	3.76	0.51	4.02	-0.13	4.43	-0.28	3.79	-1.24	1.67	2.96	5.17	+2.12	3.99	+0.83	0.70	-2.05	1.58	-3.09	46.36	-4.15
Berea	6.22	+1.69	3.97	-0.80	9.41	+4.48	5.91	+0.30	2.00	-1.98	4.58	0.30	3.08	-1.83	3.12	-1.82	1.86	-0.80	4.74	+1.67	0.83	-2.07	1.33	-3.26	45.05	-3.12
Catlettsburg	5.02	+1.12	2.90	1.00	7.29	+3.72	2.22	2.43	5.28	+1.82	3.98	-0.18	4.16	-0.52	1.97	-2.13	5.52	+1.87	4.28	+1.81	0.98	-1.47	0.73	-2.41	44.33	+0.71
Falmouth	5.42	+1.15	2.58	0.66	3.89	-0.47	4.55	+1.32	4.27	-0.69	5.29	+1.07	3.17	0.74	2.90	0.54	4.46	+2.49	2.82	+0.65	0.62	-3.00	1.34	-1.77	41.31	-1.19
Farmers	6.10	+2.30	4.28	+1.11	8.70	+4.14	3.24	1.26	5.32	+1.26	5.49	+1.50	3.19	-2.11	2.40	-2.42	4.23	+1.14	4.29	+0.99	1.13	-1.60	1.67	-1.93	50.04	+3.12
Jackson	6.72	.....	6.38	...	6.93	+2.30	3.26	.....	3.74	.....	6.71	.....	6.43	.....	3.57	.....	4.05	.....	4.20	.....	0.72	.....	1.72	.....	54.43	.....
London	7.11	.....	5.98	.....	9.37	.....	3.24	.....	2.46	.....	3.91	....	5.97	.....	0.98	.....	2.88	.....	5.54	.....	0.92	.....	2.33	.....	50.69	.....
Louisa	3.69	+0.09	3.71	+0.03	6.45	+2.33	2.31	0.91	3.70	-0.52	5.81	+0.77	2.51	-1.03	.....	.....	4.35	+1.83	4.62	+2.21	0.84	-2.46	1.75	-1.41	....	.....
Manchester	6.70	+2.71	3.66	+0.72	8.03	+3.53	2.30	-1.05	1.34	-1.56	4.67	.....	5.47	.....	1.30	.....	2.04	.....	2.61	.....	0.15	.....	2.58	.....	40.85	.....
Maysville	5.07	+1.12	2.61	0.72	4.61	0.03	2.65	-0.78	4.60	+0.55	4.11	-0.19	5.97	+1.43	2.15	-1.83	4.38	+1.75	3.03	0.07	0.84	-2.00	1.56	-2.20	41.61	-2.84
Middlesboro	7.90	+3.22	1.28	0.64	13.39	+7.91	3.22	-1.57	3.25	0.96	3.65	-0.85	6.32	+0.82	5.14	+1.61	1.85	-0.90	3.03	+0.73	0.36	-3.15	3.11	-1.04	55.50	+5.14
Mount Sterling	7.41	+3.03	3.52	0.75	7.16	+1.23	5.89	-2.24	4.66	+0.61	6.53	+1.55	3.80	-1.21	1.57	2.37	3.52	+0.63	4.34	+1.94	1.21	-2.24	1.57	-2.38	51.18	-2.28
Pikeville	5.56	+1.77	4.88	+1.37	10.40	+6.19	2.21	1.69	3.54	+0.78	3.48	-0.83	3.64	0.11	8.80	+5.28	4.30	+1.43	3.45	+1.01	0.50	-2.37	1.95	-2.31	52.71	+10.55
Richmond	7.96	+3.89	3.95	+0.31	5.42	+0.70	4.58	+0.97	2.19	1.35	3.45	0.49	4.55	+0.68	2.50	-0.70	3.14	+0.50	3.95	+1.70	1.10	-1.59	2.16	-1.50	44.95	+3.12
Weeksbury	6.99	....	4.81	.....	...	.....	3.59	.....	2.16	.....	3.32	.....	5.02	.....	6.93	.....	2.93	.....	3.60	.....	0.97	.....	2.68	.....	.....	.....
Williamsburg	7.15	+3.12	4.49	1.00	11.07	+6.15	3.34	-1.06	3.08	-1.00	3.84	0.71	5.48	-0.39	4.38	-0.14	3.08	-0.28	4.09	+1.54	0.45	-2.48	2.05	-1.64	52.50	+4.11

The departures from normal precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

T. Precipitation is less than 0.01 inch rain or melted snow.

Monthly and Annual Mean Temperatures for the Year 1917, with Departures from the Normal.

Stations	January		February		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		A	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
WESTERN DIVISION.																										
eaver Dam	37.6	+2.8	35.6	+1.2	47.1	-0.4	54.8	-0.6	58.9	7.0	71.5	2.1	75.0	-2.6	72.6	-3.6	67.0	-3.6	49.3	8.1	44.4	-1.9	25.6	-10.0	[illegible]	[illegible]
landville	39.4	+6.0	36.2	0.2	49.4	+2.3	57.8	+0.6	61.0	5.5	72.3	-2.6	76.4	1.5	74.3	2.5	69.0	-2.0	52.9	5.2	48.0	+1.4	28.[illegible]	-8.1	55.4	-1.5
alhoun	37.6	+0.7	36.3	-0.3	47.8	-2.0	57.3	-1.6	60.2	-7.4	72.2	-2.8	76.4	-1.4	75.2	-2.3	69.9	-2.3	52.7	6.6	46.0	-2.4	27.4	[illegible]	[illegible]	[illegible]
arlington	37.0	+1.4	34.6	1.8	47.8	+0.3	56.4	-0.8	61.0	5.8	73.6	-2.0	77.8	-0.1	76.2	0.4	70.8	+0.3	52.6	6.4	46.3	-1.4	27.1	-12.1	55.1	[illegible]
reenville	38.2	......	c33.3	....	b47.0	....	57.0	....	c59.8	..	c71.9	....	76.0	....	71.0	..	69.1	..	a52.6	....	c46.8		[illegible]		54.5	
opkinsville	40.4	+2.4	40.1	+3.1	49.4	+0.2	57.2	+0.4	60.4	-7.2	72.6	2.6	76.6	-2.2	74.8	-3.0	69.6	-2.3	54.2	6.2	47.6	-0.7	30.4	[illegible]	56.1	[illegible]
arion	b40.0	+4.0	36.2	+0.5	47.4	-1.2	d57.9	+0.6	63.6	-3.5	73.8	1.1	76.2	-1.6	74.6	3.6	.....		52.4	-7.0	..					
ayfield	38.0	....	35.0	....	46.9	......	55.8	1.4	59.8	6.4	71.4	2.2	76.2	-1.4	74.6	2.7	70.0	-1.1	52.7	5.8	47.3					
wensboro	36.2	+0.7	33.9	-0.8	46.0	-0.9	55.4	+0.2	59.6	-6.7	71.4	-2.9	76.2	-1.8	74.0	2.4	68.6	-2.1	51.0	-8.0	44.6	-2.9	26.6	-10.0	[illegible]	[illegible]
aducah	40.7	+3.3	40.3	+4.3	50.1	+0.3	59.6	+0.4	62.7	-7.0	72.6	5.3	77.3	-4.0	77.8	-2.7	72.8	1.2	55.8	5.2	48.1	-0.8	30.0	-8.6	[illegible]	2.2
rinceton	b38.6	+4.8	40.0	+5.5	c50.6	+1.3	59.2	+0.6	.....	.....	.....	.....	.....	...	.....	.....	.....	...			.....	.....				
ussellville	c36.6	......	34.3	....	45.7	....	55.6	...	58.2	....	b66.8	...	76.1		74.2		69.3		52.0	....	45.6		27.0		53.4	
CENTRAL DIVISION.																										
lpha	41.9	+1.6	37.9	-0.6	48.0	-2.7	57.8	+0.5	58.4	-8.2	69.4	-3.7	74.6	1.6	72.0	4.1	66.1	-4.6	51.8	-7.7	45.1	-4.4	31.2	-9.2	54.5	-3.7
nchorage	33.9	+0.3	31.8	0.3	43.9	1.2	53.4	0.0	57.0	7.4	70.8	-1.2	71.4	-1.7	73.4	1.2	66.6	-2.5	48.8	7.7	42.2	2.3	22.8	-11.1	51.6	3.0
ardstown	35.5	-0.4	32.9	-1.6	45.4	1.2	55.4	+0.1	58.9	-8.1	72.0	-2.6	76.6	-1.9	75.0	2.2	69.0	-2.9	50.2	9.3	43.8	-3.2	26.2	9.5	53.4	2.6
owling Green	36.2	-0.8	37.0	-0.2	48.3	-0.3	57.7	-0.4	61.2	6.4	72.9	-3.0	a77.5	1.5	a75.9	-3.0	71.0	1.0	51.1	4.8	46.2	-1.1	30.2	-7.4	55.7	2.5
dmonton	38.1	+2.2	38.6	+2.2	46.8	1.4	56.2	0.4	58.8	-6.2	a70.4	-2.7		.....	73.1	-1.9	68.0	-1.7	51.2	5.7	44.6	-2.2	c28.1	9.5	.....	....
ubank	35.5	+0.6	c33.6	+0.3	42.2	-4.1	55.2	+1.4	56.2	8.0	68.3	2.8	73.4	1.3	a72.8	1.0	66.4	-2.3	48.2	8.5	42.9	-1.6	25.8	-9.9	51.7	3.1
rankfort	35.6	-0.6	34.6	-0.2	44.8	1.4	54.2	-0.9	58.3	-6.6	70.9	-2.4	75.0	1.4	74.0	-0.7	64.8	-3.8	51.6	4.9	43.6	-2.6	25.6	-11.7	52.4	3.4
ranklin	38.5	+0.9	37.2	-1.4	47.4	-2.7	57.8	-1.3	61.0	-6.0	71.9	3.0	76.6	-0.9	73.7	3.5	.....	.....	....	.....	.....	.....	.....	.....	....	
reensburg	35.0	+0.8	34.0	+0.3	44.0	-2.8	55.5	+0.5	58.1	-6.8	70.4	-3.1	74.9	-1.5	73.0	-2.6	66.4	3.6	49.4	-7.1	42.8	1.9	25.6	-10.4	52.4	3.2
vington	37.0	+0.8	35.0	+0.7	46.9	+0.1	55.8	+0.3	60.0	6.3	71.6	2.1	76.0	1.4	74.4	-1.6	68.2	-2.2	51.9	3.7	45.3	1.4	26.9	9.1	54.1	2.1
unction City	36.4	+1.8	35.2	+2.1	44.9	1.2	55.0	+0.5	58.0	-6.5	70.2	-1.4	74.6	0.4	73.0	-1.3	66.6	3.0	51.4	-6.1	44.4	+1.8	26.0	9.3	53.0	1.9
eitchfield	36.4	+1.3	34.7	+0.7	46.2	+0.2	56.0	+0.6	59.2	-6.3	71.6	1.3	75.9	-0.7	73.6	-1.8	67.4	-2.4	51.1	-7.0	44.5	-1.8	26.6	-9.2	53.6	2.3
exington	35.2	+2.2	31.8	-3.8	44.2	+0.8	53.8	+0.1	56.9	7.4	70.0	-3.2	74.4	-2.2	74.4	-0.2	67.2	-0.7	50.0	-6.5	44.0	-0.7	25.4	-11.0	52.3	2.7
oretto	a34.8	-1.6	....	.....	47.5	-0.6	56.6	+1.7	60.0	5.7	71.6	0.9	75.9	-0.4	73.9	-1.3	67.9	-2.3	51.5	-6.8	c43.4	-3.1	25.4	-10.8		
OUISVILLE	35.9	+1.6	32.2	-4.1	46.4	+1.1	54.8	-1.4	59.6	7.1	72.0	3.0	76.4	-2.2	75.5	-1.0	68.8	-1.1	50.8	-7.6	45.2	-1.1	26.0	-12.1	[illegible]	-3.2
Do (Cherokee Park)	35.0	.....	34.4	......	45.4	..	54.6	.	58.2	......	70.0	......	73.9	......	72.8	......	66.4	......	50.8	.....	43.2	..	25.1	.	52.5	
John	33.2	0.9	31.6	-1.4	43.4	-1.7	54.6	-0.4	57.8	-6.9	71.1	-1.2	75.0	0.7	73.4	-1.3	67.4	-1.7	50.3	-7.3	43.2	-2.2	23.8	10.8	52.0	3.1
ott	33.6	+0.5	32.0	+1.3	43.1	-0.3	52.6	-0.5	56.8	7.0	69.0	2.6	73.4	3.2	73.5	-1.6	65.8	-3.7	49.9	-7.9	42.7	-2.3	23.4	-9.8	51.3	-3.1
elbyville	31.0	2.6	29.2	-4.8	42.6	-2.1	52.6	-2.1	57.6	-7.4	70.4	-3.5	74.9	-2.2	73.8	-1.7	68.0	1.5	48.6	-7.8	42.0	-1.9	23.0	-12.9	51.1	4.3
ylorsville	34.4	-0.7	34.6	+0.2	44.7	1.1	53.8	-0.6	58.4	-6.1	71.0	-1.3	74.5	-1.8	72.2	-2.2	65.6	-2.6	49.4	6.6	42.4	-2.5	23.8	-11.3	52.1	-3.0
illiamstown	31.8	0.9	30.1	-0.9	41.6	1.6	52.2	-0.1	57.1	-6.0	69.8	0.8	74.8	0.8	75.2	-1.4	67.6	-0.8	49.4	7.6	44.0	1.1	24.8	-8.1	51.5	2.3
EASTERN DIVISION.																										
attyville	35.5	+1.0	33.8	-0.1	43.6	-2.6	56.2	+2.8	57.4	-6.7	70.2	-1.6	73.2	-2.3	....	......	a66.8	3.2	50.1	-6.4	a42.0	1.7	25.2	8.9		
rea	38.7	+1.4	34.8	-1.0	45.4	1.9	55.8	+0.2	58.0	-7.8	70.2	2.3	74.4	-2.0	73.4	1.2	66.0	-3.3	51.2	-7.3	44.1	3.1	28.7	8.6	53.4	-3.0
rmers	36.0	-0.7	34.2	-1.4	45.9	+1.0	52.8	-1.6	57.6	6.1	70.8	-0.6	73.4	1.5	73.4	-0.4	a65.8	-2.7	50.0	6.6	41.6	3.4	23.4	-12.1	52.1	2.9
ysville	31.8	1.3	31.5	-1.5	41.4	2.7	52.8	-0.8	57.0	-8.1	70.2	-2.7	75.0	-2.0	74.2	1.5	65.8	3.8	48.8	8.3	41.2	3.4	23.1	-10.7	51.1	3.9
ddlesboro	41.8	+4.0	36.4	-2.5	47.8	-0.7	58.4	+2.2	58.4	-6.3	69.3	-2.9	73.8	-0.9	72.2	2.2	67.1	-1.7	51.4	-5.8	44.8	-1.0	30.2	7.7	54.3	-2.1
ount Sterling	33.5	-0.3	31.0	-2.3	41.4	-2.7	53.6	+0.2	57.8	-6.1	69.5	-2.9	74.2	-1.4	73.2	-0.7	65.6	-2.0	48.6	6.2	41.9	2.4	23.0	12.4	51.1	3.3
chmond	37.5	+3.8	34.3	-0.6	45.0	-0.3	56.8	+1.6	58.6	-6.9	70.2	-3.2	74.4	-2.5	73.7	-1.9	67.2	3.4	49.9	8.0	43.4	-3.4	26.7	10.6	53.1	-3.0
eksbury	40.6	......	37.4	.....	47.4	....	59.9	....	f59.2	...	c71.0	......	74.6	......	70.7	.....	66.6	....	53.4	.....	45.8	....	30.3	...	54.7	
lliamsburg	39.6	+1.0	37.7	+0.2	45.4	-0.7	57.9	+2.2	58.8	-7.5	70.7	-2.8	75.2	-1.6	74.4	-1.7	67.8	-2.8	51.0	8.9	44.0	3.1	28.8	-9.5	54.3	[illegible]

All temperature data are taken from self registering thermometers.

The departures from normal temperature are computed only for such stations as have ten or more years of record, but all complete reports are used in determining ction or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc.

LISTS OF COOPERATORS.

Cooperative Observers.

Stations.	Observers.	Stations.	Observers.	Stations.	Observers.	Stations.	Observers.
Alpha	W. W. Hicks.	Cynthiana	P. H. Kehoe.	Irvington	W. J. Piggott.	Paducah	E. Futrell, Jr.
Anchorage	C. E. Barret.	Earlington	Brick Southworth.	Jackson	J. L. McCoy.	Pikeville	I. M. Williams.
Bardstown	Chas. M. Talbott.	Edmonton	P. W. Ray.	Leitchfield	John E. Stone.	Princeton	Ray Baker.
Beattyville	A. H. Bowman.	Eubank	Mrs. Katie Payne	Lexington	U. S. Weather Bureau	Richmond	J. W. Crooke.
Beaver Dam	Mrs. Della M. Davis	Falmouth	J. V. Oldham.	Loretto	Loretto Academy.	Russellville	E. C. Shelton.
Berea	C. F. Rumold.	Farmers	Durwood Cassity.	Louisa	Carrie S. Adams.	St. John	Bethlehem Academy
Blandville	E. W. Horr.	Frankfort	Mrs. Amelia Wood	Louisville	U. S. Weather Bureau	Scott	E. B. Wilson.
Bowling Green	Mrs. L. G. Causey.	Franklin	....	Manchester	Mrs. Geo. P. Hatton	Shelby City	H. F. Ewing.
Brownsville	Jas. H. Young.	Greensburg	Mrs. B. K. H. Alcorn	Marion	B. C. Paris.	Shelbyville	Mrs. L. A. Burnett
Burnside	C. L. Hurt	Greenville	C. R. Lovell.	Mayfield	J. N. Davis.	Taylorsville	E. D. Bourne.
Calhoun	W. A. Taylor.	Hazard	....	Maysville	Mrs. Mary D. Marsh.	Weeksbury	O. A. Lund
Catlettsburg	Forester Farley.	Henderson	W. W. Shelby.	Middlesboro	B. H. Perkins.	Williamsburg	N. C. Jones.
Cherokee Park	Wm. I. Hunt.	High Bridge	Miss Lulu Wood.	Mount Sterling	W. R. McKee.	Williamstown	Miss Rose Carter
Cloverport	W. A. Cockerill.	Hopkinsville	W. F. Randle.	Owensboro	Henry S. Berry.	Woodbury	Virgil M. Whalin.

Daily Forecast Display and Distributing Stations.

Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen
Ashland	Park City Tel. Co.	Eddyville	Mgr. Cum. Tel. Office	Lebanon	Cumb. Tel. Co.	Olive Hill	B. S. Tel. Co.
Bardstown	Mgr. Cum. Tel. Office	Elizabethtown	Mgr. Cum. Tel. Office	Leavenworth .. Ind.	Mgr. Cum. Tel. Office	Owensboro	Mgr. Cum. Tel. Office
Bedford	Mgr. Cum. Tel. Office	Fairfield	Peoples Tel. Co.	Leitchfield	Mgr. Cumb. Tel. Co.	Paducah	East Tenn. Tel. Co.
Benton	Mgr. Cum. Tel. Office	Frankfort	Mrs. Amelia Wo	Lexington	U. S. Weather Bureau	Pikeville	E'n Ky. Home Tel. C
Bowling Green	A. M. Causey.	Franklin	FarmersMut'lTelCo.	Louisa	Sou. Bell Tel.&T. Co	Prestonburg	Sou. Bell Tel. Co.
Brumfield	Postmaster.	Fulton	Fulton Leader.	Louisville	U. S. Weather Bureau	Princeton	Mgr. Cumb. Tel. Co.
Burnside	A. B. Massey.	Hazard	Mgr. Cum. Tel. Office	Madisonville	Mgr. Cumb. Tel. Co.	Richmond	J. W. Crooke.
Cadiz	Mgr. Cum. Tel. Office	Henderson	Mgr. Postal TelOffice	Madison .... Ind.	Chas. G. Dickerson	Shelbyville	Mgr. Cumb. Tel. Co.
Catlettsburg	Mrs. M. M. Bruns.	Hickman	Sexton & Speer	Maysville	Mrs. Mary D. Marsh	Taylorsville	Cumb. Tel. Co.
Cave City	Geo. T. Tucker.	Hodgenville	Mgr. Cum. Tel. Office	Middlesboro	B. H. Perkins.	Union	Cons. Telephone Co.
Cloverport	Wm. A. Cockerill	Hopkinsville	Christian-Todd T. Co	Morganfield	Mgr. Cumb. Tel. Co.	Versailles	Postmastei
Corydon ....Ind.	Mgr. Cum. Tel. Office	Irvington	Mgr. Cum. Tel. Office.	Mount Sterling	Cumb. Tel. Co.	Whitesberg	Mgr. Cumb. Tel. Co.
Danville	Mgr. Cum. Tel. Co.	Jackson	Mgr. Cum. Tel. Office	Mt. Vernon	Cumb. Tel. Co.	Wickliffe	Mgr. Cumb. Tel. Co.
Earlington	Brick Southworth.	Lawrenceburg	Mgr. Cum. Tel. Office	New Haven	Mgr. Cumb. Tel. Co.	Williamsburg	Mgr. Cumb. Tel. Co.

NOTE—Tables and charts giving climatic data for Kentucky in detail during 1917 have been published for each month at the Kentucky section center, Weather Bureau Office, Louisville, Ky., and can be obtained from the Official in Charge at that office. Indexes to special articles published during past years in Kentucky climatological reports will be found in the Monthly Report for June, 1909,

1.05
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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

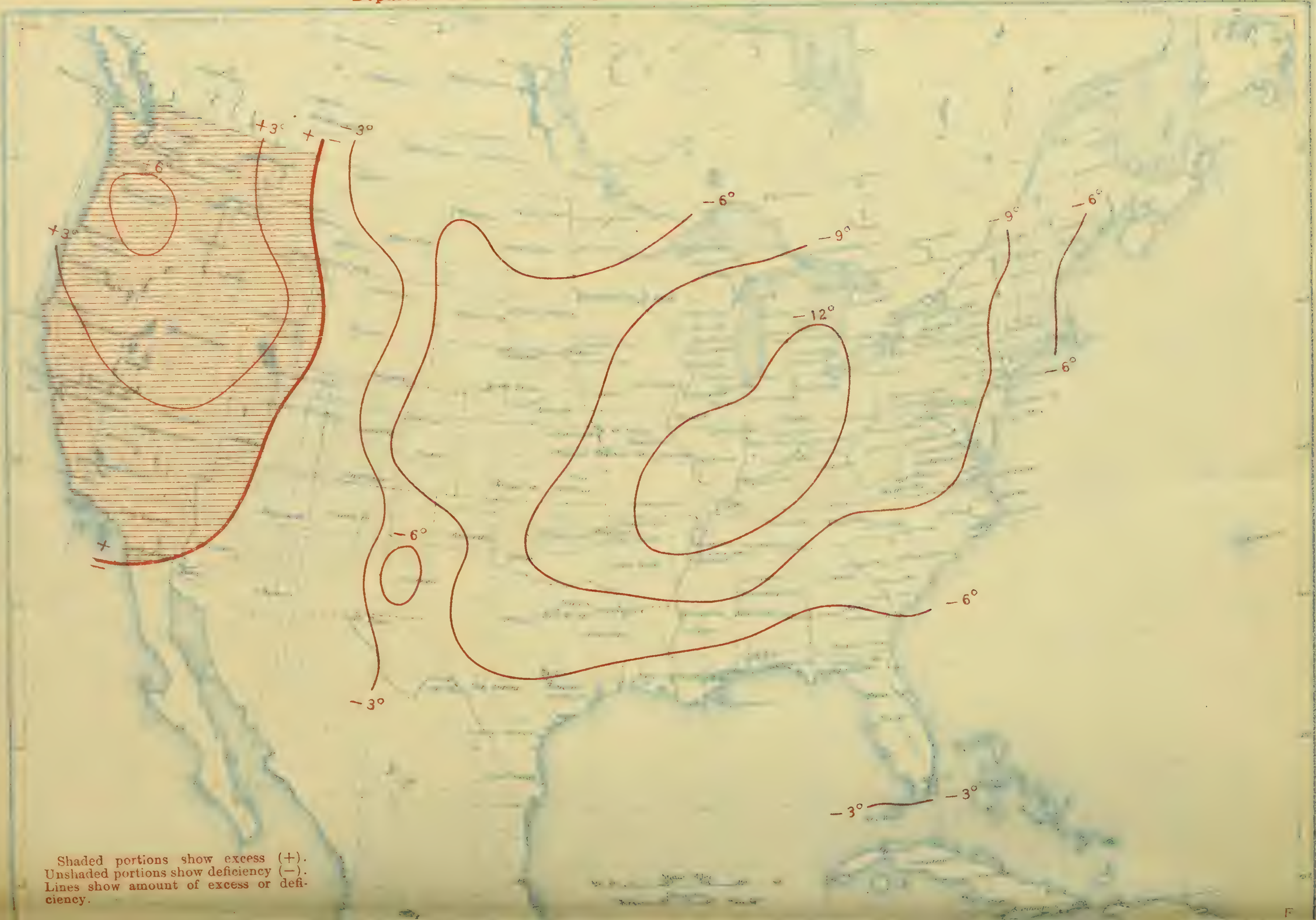
KENTUCKY SECTION

JANUARY, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 19, 1918

Departure of the Mean Temperature from the Normal, January, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XXIII. Louisville, Ky., January, 1918. No. 1

GENERAL SUMMARY.

January was by far the coldest month on record in Kentucky, he average temperature for the State, 20.6 , being more than ° lower than for any other month since State averages were stablished, and also much lower than the mean temperature for ny month of record at the Weather Bureau stations at Louisille and Lexington. At many stations minimum temperatures f zero or below occurred on 10 days, and minimum temperaures only a few degrees above zero on as many more. Tempratures of 12° to 20° below zero occurred on the 12th at all xcept a few eastern stations; which in connection with a wind elocity of over 40 miles per hour at the highest, and 30 miles er hour during most of the day, produced what are believed to e the most severe weather conditions experienced in this State half a century, or probably since the "cold New Year's ay," January 1, 1864. At many stations the maximum emperature on the 12th of this month did not rise to zero. uring the night of the 13th a heavy snow-storm set in and ntinued through the 14th. The amount of snowfall in this orm ranged from 9 to 12 inches from Jefferson county southestward to the Mississippi River, and fell on an accumulation 5 to 12 inches over the same area. This exceptional amount snow, together with the continuation of temperatures near ero, practically paralyzed transportation facilities, especially ter-urban and street car systems. The fuel shortage added to e difficulties of the situation, and caused the closing of schools r several days.

The total snowfall of the month was the heaviest ever known, me stations reporting more than three feet, while many stations ported two feet or more. Snow covered the ground during e entire month, except in some southern counties, protecting e winter grain during the severe weather. In some of the utheastern counties where the snow went off, the ice and sleet orms of the 26-27th injured wheat to some extent. The month as unfavorable for handling or marketing tobacco, and for thering corn, a large part of the corn crop being still in the ld at the end of the month. Farm operations were suspended, cept the care of stock; country roads were impassable so that rmers were snowbound for from one to two weeks in northern d western counties; and the products of the farm could not be auled to the towns, so that a shortage of corn was felt in some ctions.

PRESSURE.

Eight low and six high pressure formations dominated the eather conditions over this section during the month. Nearly l of both classes were of more than usual strength, the lows eing attended by snow and sleet and the highs by intense cold. ow pressure areas moved as follows: 1st-2d, a deep low moved om the Missouri-upper Mississippi Valley due southeastward cross the Ohio Valley to the coast of Florida; 5-9th, a deep w, increasing in energy, moved from the lower Mississippi alley northeastward over the Ohio Valley to the lower Lake gion and north Atlantic states. A low of remarkable severity oved from the west Gulf coast northeastward to the lower ississippi Valley and Alabama, thence almost due north over e Ohio Valley and western slope of the Appalachians to the stern Lake region and Ontario during the 10-12th. Other ws of lesser importance passed over or near the Ohio Valley the 9-10th; 14-15th; 23d-24th, 26th, and the 27 (p. m.) 28th. High pressure areas dominated during the 3d, 6th, 13th, 20th-23d, 27th, and the 29th-31st.

The mean sea-level pressure, determined from the records of two stations, was 30.00 inches. The extremes were 30.47 inches at Louisville on the 21st, and 29.08 inches at Lexington on the 11th.

TEMPERATURE.

The average temperature for the State, based on the reports of 40 stations, was 20.6°, which is 14.6° below normal. The departure from normal was greatest in the counties near the Ohio River, where the snowfall also was greatest, the deficiency at a number of these stations amounting to 17°. The mean temperature was below normal on 29 days at Louisville and on 27 days at Lexington, the daily deficiency during the period 7th-23d ranging from 10° to 42°. Maximum temperatures were below freezing on most days, and reached 40° on only about four days. The monthly extremes were 62° at Weeksbury on the 28th and Middlesboro on the 29th, and −20° at Paducah on the 12th.

PRECIPITATION.

The average precipitation for the State, computed from the reports of 52 stations, was 5.09 inches, which is 0.70 inch above normal. In the upper Cumberland basin and over the southern mountain counties, monthly amounts ranged between 6 and 10 inches; in the central and extreme western counties 5 to 6 inches, and over a broad belt bordering the Ohio from 3.5 to 5 inches. Amounts at the various stations ranged between 3.17 inches at Earlington and 10.28 inches at Middlesboro. Precipitation was of almost daily occurrence during the first three weeks, and generally in the form of snow. Rain was general during the period 26-28th, and heavy over the southeastern counties. Snowfall averaged 23.3 inches for the State. In the western and Southern counties several stations reported more than 30 inches, while 20 to 26 inches occurred over counties near the Ohio River and 13 to 17 inches in the mountain section. At the end of the month from 2 to 10 inches remained on the ground in the central and northern counties.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	38.0	+2.8	65	13	3.52	−0.87	
1890	44.0	+8.8	77	10	6.43	+2.04	..
1891	37.0	+1.8	68	14	5.40	+1.01	..
1892	29.0	−6.2	65	−6	2.72	−1.67	..
1893	26.0	−9.2	67	−22	2.08	−2.31	..
1894	38.0	+2.8	78	−12	2.91	−1.48	..
1895	30.0	−5.2	78	−16	5.71	+1.32	11
1896	36.1	+0.9	74	−3	1.25	−3.14	6
1897	32.0	−3.2	75	−16	3.25	−1.14	8
1898	40.4	+5.2	72	6	8.76	+4.37	12
1899	34.4	−0.8	68	−18	6.23	+1.84	11
1900	37.2	+2.0	77	−8	2.80	−1.59	8
1901	36.7	+1.5	75	4	1.85	−2.54	7
1902	33.7	−1.5	70	5	5.14	+0.75	7
1903	34.8	−0.4	82	−9	2.50	−1.89	9
1904	32.3	−2.9	70	−9	3.17	−1.22	10
1905	27.5	−7.7	70	15	2.83	−1.56	11
1906	39.7	+4.5	80	−9	3.48	−0.91	8
1907	43.2	+8.0	83	−11	8.02	+3.63	14
1908	35.0	−0.2	62	7	2.20	−2.19	8
1909	38.3	+3.1	77	−8	3.47	−0.92	9
1910	33.8	−1.4	70	−20	4.41	+0.02	10
1911	39.7	+4.5	73	−16	2.88	−1.51	11
1912	25.9	−9.3	61	−20	3.09	−1.30	8
1913	42.5	+7.3	76	13	11.41	+7.02	14
1914	39.4	+4.2	79	5	2.31	−2.08	6
1915	33.0	−2.2	65	0	5.03	+0.64	13
1916	41.2	+6.0	78	−5	7.27	+2.88	14
1917	36.7	+1.5	74	−17	6.38	+1.99	12
1918	20.6	−14.6	62	−20	5.09	+0.70	14

Climatological data for January, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	
Western Division.																				
Beaver Dam	Ohio	441	15	^{a}19.8	−14.8	51^{a}	26^{a}	−16^{a}	21^{a}	38^{a}	......	......	......	......	......	4^{a}	9^{a}	3^{a}	......	Mrs. Della M. Davis.
Blandville	Ballard	445	36	20.7	−12.7	53	26	−14	12	27	5.46	+0.83	1.60	37.9	12	9	7	15	sw.	E. W. Horr.
Calhoun	McLean	437	14	20.1	−16.2	51	26	−18	12	32	4.71	−0.38	1.48	33.6	14	5	16	10	nw.	W. A. Taylor.
Earlington	Hopkins	420	27	19.5	−16.1	54	25	−15	12	36	3.17	−0.96	.75	27.0	13	7	1	23	s.	Brick Southworth.
Greenville	Muhlenburg	519	1	21.7	......	55	25	−15	12	35	4.89	......	1.56	32.3	16	8	10	13	n.	C. R. Lovell.
Henderson	Henderson	......	9	......	......	......	......	......	......	......	3.43	−0.30	.86	24.5	8	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	21	22.8	−15.2	54	25	−16	12	38	4.75	−0.38	1.30	27.0	14	6	6	19	w.	W. F. Randle.
Marion	Crittenden	571	19	19.2	−16.8	54	25	−17	12	39	5.92	+1.12	......	......	9	9	8	14	sw.	B. C. Paris.
Mayfield	Graves	364	8	^{a}19.0	......	55^{e}	25	−17	13	47^{e}	......	......	......	......	......	6^{e}	12^{e}	8^{e}	......	J. N. Davis.
Owensboro	Daviess	479	21	18.1	−17.4	47	5†	−16	12	41	3.40	−1.11	0.95	24.5	13	11	7	13	nw.	Henry S. Berry.
Paducah	McCracken	341	18	21.8	−15.6	57	27	−20	12	39	6.74	+1.97	1.50	42.0	16	13	0	18	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Ray Baker.
Russellville	Logan	590	6	21.1	......	52	25	-15	12	45	4.72	......	2.85	......	8	9	7	15	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	24.0	−16.3	55	25	-12	12	45	9.91	+5.06	4.00	37.8	17	7	1	23	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	17.5	−16.1	45	6†	−16	12	38	4.00	+0.34	1.57	24.3	13	13	5	13	w.	C. E. Barret.
Bardstown	Nelson	637	21	21.5	−14.4	50	26	−14	12	43	5.11	+0.28	1.30	14.7	12	9	3	19	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	22.0	−14.6	53	25	−15	12	46	7.10	+2.46	2.25	19.0	15	11	10	10	n.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......	......	......	......	......	......	......	5.27	......	1.40	22.5	14	......	......	......	......	James H. Young.
Burnside	Pulaski	773	25	......	......	......	......	......	......	......	9.18	+5.43	3.50	21.0	17	......	......	......	......	C. L. Hurt.
Carrollton	Carroll	492	18	......	......	......	......	......	......	......	4.20	+0.56	1.26	......	12	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	4	......	......	......	......	......	......	......	3.23	......	1.07	26.4	16	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{a}23.8	−12.1	51^{e}	27	−15^{e}	12†	48^{e}	4.82	+0.77	1.10	30.8	14	6	5	20	n.	P. W. Ray.
Eubank	Pulaski	1177	23	20.0	−14.9	51	26	−13	12†	42	6.25	+2.28	2.33	20.2	16	10	3	18	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	21.4	−14.8	47	6	-12	12†	45	4.46	+0.84	1.33	12.9	15	11	5	15	w.	Mrs. Amelia Wood
Franklin	Simpson	691	22	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Greensburg	Green	581	25	20.4	−13.8	51	26	−16	21	44	5.03	+0.52	1.35	18.0	15	8	4	19	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......	......	......	......	......	......	......	5.37	+1.13	1.40	25.5	16	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	20	20.8	−15.4	49	26	−15	12	31	3.92	−0.53	1.07	25.5	14	9	2	20	sw.	W. J. Piggott.
Junction City	Boyle	985	24	21.8	−12.8	52	26†	−14	12†	36	5.69	+1.27	1.40	18.2	19	4	9	18	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	20.9	−14.2	50	25	−16	12	31	4.27	−0.25	1.40	27.5	15	10	7	14	sw.	John E. Stone.
Lexington	Fayette	989	30	19.8	−13.2	47	26	−14	12	36	4.46	+0.63	1.30	21.7	21	7	9	15	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	21.2	−15.2	50	^{a}4	−16	12	44	......	......	......	14.5	....	18	4	9	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	19.6	−14.7	47	6	−15	12	36	3.49	−0.41	1.22	24.5	14	8	8	15	sw.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do	534	8	19.2	......	45	6	−16	12	42	4.09	......	1.45	25.6	9	14	4	13	nw.	Wm. I. Hunt.
St. John	Hardin	777	21	17.4	−16.7	50	25	−16	12	44	4.53	−0.04	1.40	21.3	16	16	4	11	......	Sisters of Loretto.
Scott*	Kenton	900	20	17.4	−15.7	44	6	−16	12	43	3.76	−0.33	.82	23.1	9	7	10	14	sw.	E. B. Wilson.
Shelbyville	Shelby	825	29	16.6	−16.7	45	25	−16	12†	40	4.42	+0.45	1.38	27.3	15	9	12	10	sw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	19.6	−15.5	45	6†	−18	21	44	4.64	−0.05	.79	21.5	16	7	8	16	sw.	E. D. Bourne.
Williamstown	Grant	943	15	17.8	−14.9	45	25	−15	12†	37	4.88	+1.01	1.30	30.0	13	10	12	9	......	Miss Rose Carter.
Woodbury	Butler	533	0	......	......	......	......	......	......	......	4.08	......	.91	19.0	12	......	......	......	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	21.0	−13.0	53	25	−14	21	45	5.29	+0.54	1.90	16.5	17	8	4	19	sw.	A. H. Bowman.
Berea	Madison	1070	16	23.2	−14.1	54	26	14	21	48	5.94	+1.41	1.10	21.3	19	11	5	15	sw.	C. F. Rumold.
Catlettsburg†	Boyd	534	29	......	......	......	......	......	......	......	3.77	−0.25	1.05	......	9	......	......	......	......	Forester Farley.
Cynthiana	Harrison	684	0	......	......	......	......	......	......	......	4.49	......	1.44	17.4	11	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	29	......	......	......	......	......	......	......	3.95	+0.25	1.00	19.3	10	12	6	13	sw.	J. V. Oldham.
Farmers	Rowan	668	10	20.2	−15.1	48	6†	−16	21	48	4.22	+0.42	1.00	15.0	13	6	4	21	w.	Durwood Cassity.
Jackson	Breathitt	776	6	......	......	......	......	......	......	......	4.90	......	1.00	......	10	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	3	......	......	......	......	......	......	......	8.19	......	3.20	14.2	22	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	14	......	......	......	......	......	......	......	4.00	+0.40	1.50	......	15	......	......	......	......	Miss Carrie S. Adams.
Manchester	Clay	1400	8	......	......	......	......	......	......	......	3.84	−0.15	1.78	19.2	9	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	16.9	−16.2	48	24	−16	21	43	4.67	+0.51	1.41	25.5	13	11	3	17	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	26.7	−11.1	62	29	− 4	12	44	10.28	+5.60	2.40	17.0	10	13	11	7	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	18.6	−15.2	46	6†	−13	12	42	4.64	+0.26	1.50	......	10	9	5	17	nw.	W. R. McKee.
Pikeville	Pike	631	12	......	......	......	......	......	......	......	5.84	+1.80	2.80	20.2	13	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	20.8	−12.9	46	6†	−13	12	29	3.75	−0.32	1.00	25.9	19	9	3	19	......	J. W. Crooke.
Weeksbury	Floyd	1216	1	27.4	......	62	28	− 2	13	49	6.10	......	3.00	13.0	7	13	2	16	......	O. A. Lund.
Williamsburg	Whitley	939	20	24.7	13.9	52	27	11	21	45	7.31	+3.28	2.63	24.7	17	6	2	23	w.	N. C. Jones.
State averages and extremes		......	..	20.6	...	62	28	−20	12	48	5.09	......	4.00	23.3	14	9	7	15	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries.

T Precipitation is less than 0.01 inch rain or melted snow

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.; * Covington, Ky.

WIND.

The total wind movement at Louisville was 9.796 miles, and at Lexington 10.901 miles, with average hourly velocities of 13.2 and 14.7 miles respectively. The maximum velocity for five minutes at Louisville was at the rate of 49 miles from the west, and at Lexington 42 miles from the southwest, on the 12th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 84 per cent, at 12 noon, 71 per cent, and at 7 p. m. 76 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 48 an at Lexington 36.

MISCELLANEOUS.

January 14.—Three persons were killed and several injured at Louisville in collision between inter-urban cars, due to conditions produced by the blinding snow storm.

January 15.—Four persons were killed at Louisville by the collapse of a roof, d to the heavy snow load.

January 28. Several bridges were swept away by floods in Clay County; als 75,000 logs and other lumber at Burnside. Portions of Pineville, Middlesboro, Pik ville, and Manchester were flooded.

(Continued on next page.)

Daily Precipitation for January, 1918.

Day of month

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division.																																	
Beaver Dam ‖	G																	.20			.50		.15										
Blandville	M		T			.92		.02	.20		.25	1.00		.01	1.60		.10	T		12		30					T	.59	.35				5.16
Calhoun	G	T.	12			T.	.72	T	T	.16		.70	.06	T.	1.48	.40	01	T	T	01	T.	.01	37				.02	.19	.46				4.71
Carlington ‖	G		06				.20	.11		.19		.42	.34		.35	.28		.05			.08		.31					.03	.75				[illegible]
Greenville	G		.08				.45			.22		.90	.04	.10	1.56	.46	.03		.03	65		15	.10				07	.20	.45				[illegible]
Henderson ‖	O						.80	T	T.	13		.20	.65		.15	.80		T					.40					T	.30				3.43
Hopkinsville	C	.05	.05	T	T.	T	.40	T.	.20		.55	.70			.25	.10	.25	T.		20			.20				35	.15		1.30			[illegible]
Marion	O	T.	T.			.20	.40	T	T.			*	*	T.	*	4.00	T.	T.	T.	T	*	.35	T.				T.	97	T				5.92
Mayfield	M						.25	T.		.35		.25	.80								50		.40										
Owensboro ‖	O	.06	.06				.25	.28		.10		.05	.37		.20	95		.05					.29				T	.10	64				3.40
Paducah	O	T				T.	1.00	.02	T.	.20	.05	1.50			1.00	.61	.16		.02	.25	.13	46	.21				.06	.36	71				6.74
Princeton	G																																
Russellville ‖	G						.49			.23		15				2.85					36		.18					.36	.10				4.72
Central Division.																																	
lpha	C	T.	.20				.83	.05		.20		.30	.60		.50	.30	.10	.01	.02	.90		.60	T.				4.00	.90	.20		20		9.91
nchorage	O		.23			.23	.18	03		T.		*	.74		*	1.57	T.	T.				.12	.13				.15	.29	.33				4.00
Bardstown	S		.40				1.25	.05		.10		.08	.70		.15	1.30		.11			.06		.19						.72				5.11
Bowling Green	G			.10			.40	.05	T	.30		.20	.75		2.25	1.00		.03	.02		.30		.18					.35	1.12	.05			7.10
Brownsville	G	.10	.05				.54	.07	T	.17		.37	.69		.30	1.40		.09			.12		.40					.13	.84				5.27
urnside	C	.10	.20	T			.75	T.		.10		.05	60		.10	1.30		.05	.10	T	.40		.25					1.40	3.50	.10	.10	.08	9.18
arrollton	O		.18				.73	.06	.01	.03		.04	.70		.10	1.26							.27			T		.15	67				4.20
loverport	O	.07	.16	.03			.22	.02	.02	.13		.09	.46		.36	1.07		.03	.02				.30					.07	.18				3.23
dmonton	G		.35							.30	.23	.80	.45		1.00		.09	.02	.02		.05	.15		.14			.12		1.10	T.			4.82
ubank	C	.02	.10	.02			.30	.02		.08		.19	.55		.40	1.42		.10	.08		.22		.30						2.33			12	6.25
rankfort	K	.03	.26	T.			.70	.08	.03	.02		.07	.68		.02	1.33		.04	T	T			.03					.40	.75	.02			4.46
ranklin	G																																
reensburg	G		.17				35	.03	T.	.07		.15	.51		.42	1.26		.06	.02		.14		.22					.23	1.35	.05			5.03
igh Bridge	K	.05	.15	.05			.32	.10	.05	.10		.15	70		.20	1.40	T.	.20	05				.55					.16	1.14				5.37
rvington	O		.24			.05	.50	.12		.10		.37	.04		1.07	.15	.02	T.	T.	T.		T.	.43				07	.44	32				3.92
unction City	K		.30			.08	.47	.03	.05	.05		.10	.95		1.04	.25	.10	.08	.03	.12	.12		.30	T			.12	.10	1.40				5.69
eitchfield	G	*	.17			.25		*	.33		T.	.80	T.	T.	*	1.40	.15	.02		.08		.25					10	*	.72				4.27
exington ***	K	.21	.25			.06	.22	.08	.01	.02		.75	.08	.04	1.20	.12	.06	.03	.01	.02		.19	.11	T.	T		.25	.41	34				4.16
oretto	S		.30				.10			.05					20		1.60						.70										
OUISVILLE***	O	.11	.16			.31	.28	.01	.01	.01	.04	.61		.07	1.22		T.	T.	T.			.22	T.		T		06	.38					3.49
Do. (Cherokee Park)	O		.27				.54	.02		.03			.65			1.45	T.						.30				11		.72				4.09
. John	S	.01	.30	.20			.28	.07	02	.10		.07	.60		.30	1.40		.10	.01		.07							.15	.85				4.53
cott	L	T.	.30			T	.82	T.	T.			.40	20		.20	.74	T.	T.	T.				.19		T		.15	T	.76				3.76
helbyville	S		.20	.02			.42	.10	.01	.03		.10	.66		.10	1.38		.06	T.	T.			.22					.20	.84	.08			4.42
aylorsville	S		.32			.15	.38	.03		05		.62	.35		.64	.79	.05	.04	.01	T.			.22		T		.14	.13	.72				4.64
illiamstown	L	T.	.40	T.			1.05	.15	.02	.02		.01	.65		.15	1.30		.04	T.				.25	T.				.22	.62				4.88
oodbury	G	T.	.10	T.			.55		T.	.20		.60	.10		.20	.91		.20			.20		.30					.09	.63				4.08
Eastern Division.																																	
eattyville	K		.24	.04					.03	.23		.03	.40		.15	1.22	T.	.10	.05	.03	.25		.30						1.90	.10	03	.10	5.20
erea	K		.36				.12	.18	.10	.05		.95	.48		.55	.75	.10	.09	.15	.09	.08		.19				.10	.25	1.10		.25		5.94
atlettsburg ‖	B		.23	.05			.21	.25					.27			1.05							.22					.51	.98				3.77
ynthiana	L	.25					.55	.15					.72		.06	1.44		.06	.04	T.		.25						.22	.75				4.49
almouth	L	T.	.25	T.			1.00	.16	T.	T			.70		.13	.55		T.	T.				.30	T.				.18	.65	.03			3.95
armers	L		.25				.20	.10				.28	.20		.53	1.00		.05	.03				.34				.20	.24	.80				4.22
ckson	K	.06	.20	T.				.12	.02		T.		.50	T.	.12	1.00		.03		T.	.25		.24					.12	2.12	T.	.12		4.90
ondon	C		.45				.25	.10	.06	.12		.04	.35		.35	1.50	.11	.10	.05	.10	.10		.22	.02	.10			.55	3.20	.16	.14	12	8.19
ouisa	B		.29	.03				.10	.04	.02			.22		.03	.75	T.	.04	T	T.	.09		.23	T.				.33	1.50	.05	T.	.28	4.00
anchester ‖	K			.35			.10		.15									.30		.60	.20		.22				.14		1.78				3.84
aysville	O	T.	.39	T.			.35	.19	.02	.02	T.	T.	.81		.09	1.41		.05	.02				.27	T.	T.	T.		.20	.85				4.67
iddlesboro	C						.68				.40	.85									.50		.80				.70	2.40	.85	2.25	.85		10.28
ount Sterling	L		.38				.25	.11		T.		.04	1.00		T.	1.50		T.	.11	T.			.30				.30		.65	T.			4.64
keville	B		.50	.05				T.	T.	.02			.10		.20	.60			T.	.05	.10		.40					.42	2.80		.50	.10	5.84
ichmond	K	T.	.10	.20			.10	.05	.16	.07		.10	.35	.25	.18	.10	.10	.40	.08	.04	.10		.32					05	1.00				3.75
eeksbury	B							.80				.20			.40					.30			.40				1.00			3.00			6.10
illiamsburg ‖	C	.30	.15	T			.08	.15	T	.08		.17	.60		.10	.46		T.	T.	.10	.65	T.	.37					.64	2.63	.08	.55	.20	7.31

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

January 29.—A large part of Beattyville was flooded, and there was heavy loss in wlands along the upper Kentucky River.

January 30.—Some of the losses due to ice gorges were as follows: Cincinnati—ree large steamers and numerous smaller craft, estimated at $300,000; Carrollton—ree large boats and several smaller craft, probably $200,000, and one man was drowned; ducah—more than a dozen boats, two drydocks, and many smaller craft, value be-een $600,000 and $1,000,000.

January 31—Estimated loss at Beattyville and in vicinity $200,000; at Pikeville d vicinity $100,000; and at Madison, Indiana, two boats, valued at $23,000.

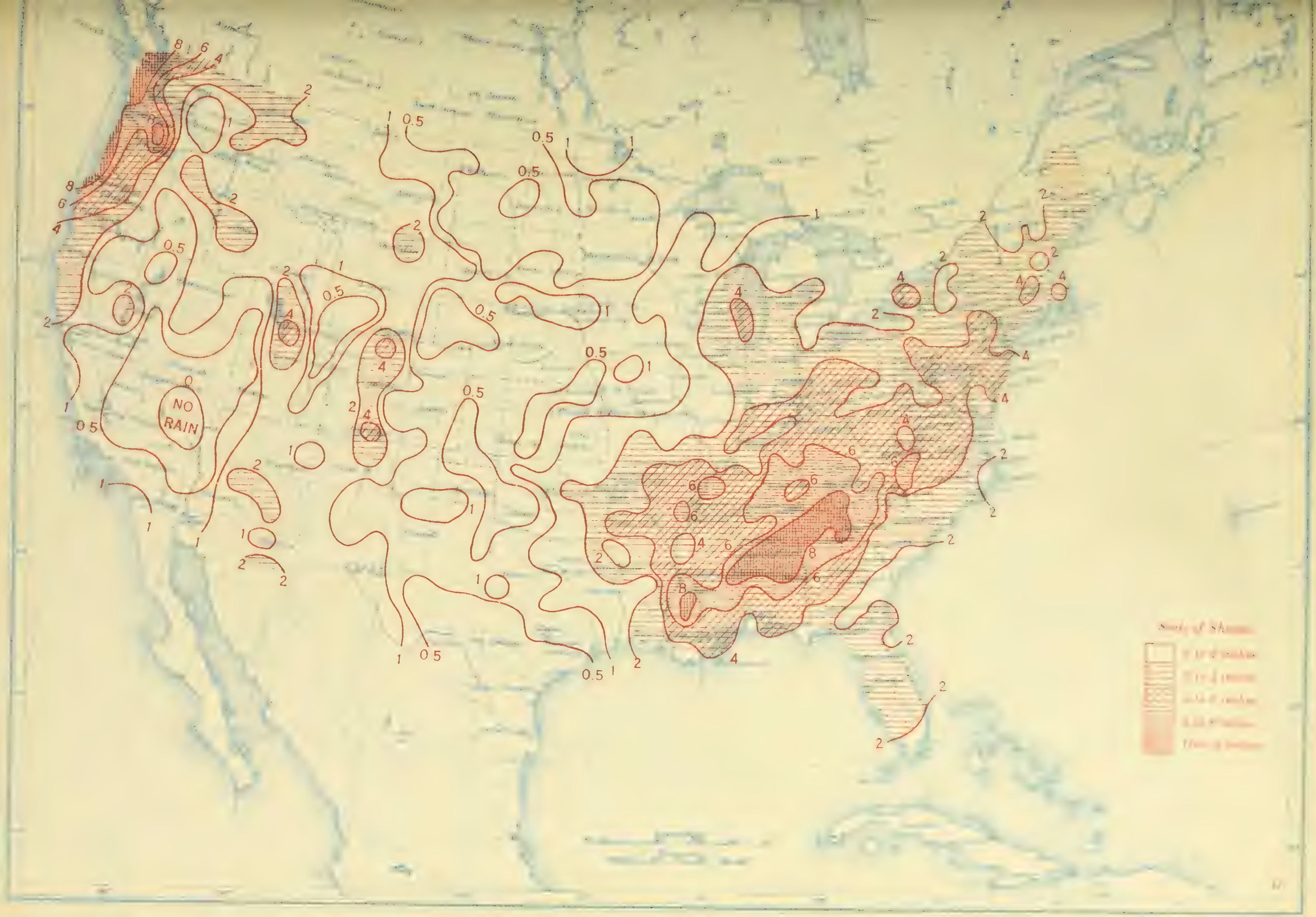
Rivers:—The Ohio River was gorged or frozen from Louisville to Portsmouth, and rtly filled with ice at Catlettsburg at the beginning of the month. By the 14th it was ozen as far up as Catlettsburg, and closed with ice at Evansville and points above; d on the 23d the Mississippi was gorged below Cairo. On the 26th heavy rains set in er the headwater tributaries of the Cumberland, Kentucky and Big Sandy, continuing until the 30th. These rains, falling on deep snow, caused unusually high water in the upper courses of these rivers, stages nearly reaching the record occurring in the Kentucky, and breaking all records in the Big Sandy and Cumberland. Crest stages as follows were reached on the 29th: Beattyville near 45.0 feet; Burnside, 69.5 feet; and Pikeville, 50 feet. The flood waters reached Catlettsburg on the 29th and began to break up the ice in the Ohio; also the flood waters and ice gorges passed out of the Cumberland and Tennessee at Paducah causing heavy loss. The gorge in the Mississippi broke on this date, carrying with it a large amount of river craft. In the Kentucky the flood reached Carrollton on the 30th, carrying out the heavy ice and sinking several boats that were lying in the mouth of that river. By the 31st the ice had broken as far down as Madison, gorging again at intervals, causing enormous loss to river craft. At this time the river was rising rapidly from Cincinnati to Madison, with flood stage nearly reached at Cincinnati. Heavy gorges were forming below Cincinnati, causing the water to rise rapidly at that place; and the month ended with a situation of unusually menacing character in the Ohio.

Daily temperatures for January, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	26	20	22	19	22	28	35	41	50	51	32	31	27	37	29	^{o}31.2
	Minimum....	-5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	10	8	-15	-16	-6	5	12	25	22	22	20	10	10	12	^{o}8.4
Blandville	Maximum ...	28	36	27	38	47	47	28	32	27	26	20	-1	16	27	22	31	26	20	18	19	15	30	32	42	52	53	37	30	24	38	20	29.3
	Minimum....	7	20	7	18	33	28	22	17	14	5	-5	-14	-6	15	6	10	17	7	3	1	-1	5	5	26	34	37	17	20	8	13	7	12.1
Calhoun	Maximum ...	21	31	24	38	40	47	31	30	28	25	24	4	16	28	28	30	25	23	19	21	17	27	27	39	49	51	48	29	24	35	32	29.5
	Minimum....	7	20	1	15	28	30	21	14	19	2	4	-18	5	12	7	4	16	5	-1	-5	-12	5	-5	25	31	30	18	20	7	17	9	10.7
Earlington §§	Maximum ...	33	29	26	41	50	36	25	30	28	28	25	-2	24	31	23	29	27	20	20	20	20	32	34	40	54	52	30	27	23	35	25	29.5
	Minimum....	9	11	7	9	23	36	22	12	19	0	1	-15	-12	-1	11	6	15	8	0	-8	-9	-2	5	10	31	28	20	20	11	15	11	9.5
Greenville	Maximum ...	26	32	24	37	41	50	32	30	30	28	26	9	16	33	32	33	27	24	17	21	23	28	31	41	55	52	49	31	25	36	30	31.3
	Minimum....	8	20	4	16	25	31	21	12	22	9	4	-15	5	16	9	4	18	7	0	-6	-12	2	12	26	33	29	20	24	9	20	11	12.1
Hopkinsville§§	Maximum ...	26	34	27	41	43	50	33	30	33	30	29	17	18	34	34	30	29	25	19	24	23	30	32	42	54	50	49	33	27	37	35	32.8
	Minimum....	11	21	7	11	29	32	23	16	26	-6	6	-16	-5	17	12	7	18	13	-1	-8	-8	-6	14	26	35	38	22	26	13	22	14	15.3
Marion	Maximum ...	24	24	24	38	42	48	31	27	29	24	22	5	15	26	24	30	24	19	20	20	19	27	29	39	54	50	49	37	24	34	28	29.2
	Minimum....	6	20	7	15	32	30	20	9	16	5	0	-17	-6	14	5	-1	12	-2	-6	-4	-5	-6	-10	24	32	31	17	20	2	15	9	9.2
Mayfield §§	Maximum ...	..	..	..	..	50	44	29	31	31	25	20	20	30	20	20	32	25	19	17	21	14	25	32	41	55	50	31	21	21	40	25	^{d}29.2
	Minimum....	..	..	..	..	..	33	23	17	25	-2	13	-12	-17	-5	-6	8	12	7	2	1	-9	-2	10	14	21	30	19	19	10	11	9	^{e}8.9
Owensboro §§	Maximum ...	25	32	26	37	47	34	24	30	27	24	24	-1	16	27	18	27	24	14	16	16	17	25	31	39	42	47	31	25	26	32	28	26.8
	Minimum....	4	15	5	15	27	34	23	16	18	4	12	-16	-10	4	6	2	16	0	-1	-10	-14	3	-10	22	29	25	18	19	8	18	10	9.4
Paducah (Lone Oak)	Maximum ...	40	22	28	40	45	48	32	32	32	25	20	5	15	28	28	30	32	20	22	19	16	32	33	41	55	52	57	38	28	34	33	31.7
	Minimum....	8	20	8	15	31	30	22	18	20	2	5	-20	-6	15	5	10	14	8	1	0	-4	4	2	24	35	35	18	19	9	15	8	12.0
Princeton	Maximum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville§§	Maximum ...	32	26	26	40	49	49	29	32	30	32	30	0	32	35	29	29	36	21	18	21	23	25	36	46	52	50	34	32	25	40	30	31.9
	Minimum....	9	19	7	7	20	39	23	16	25	-1	0	-15	-13	0	14	5	15	11	-1	-6	-10	-7	5	15	21	32	23	24	14	14	15	10.3
Central Division.																																	
Alpha	Maximum ...	23	34	29	40	52	56	40	29	30	37	42	31	19	32	30	30	28	20	20	30	35	21	32	38	55	52	35	45	35	43	34	34.5
	Minimum....	4	19	9	20	23	40	21	17	16	-1	21	-12	-3	23	20	10	15	15	7	10	-10	8	18	32	30	30	24	30	22	32	28	13.5
Anchorage	Maximum ...	22	27	21	35	41	45	32	27	27	27	28	3	15	30	28	30	25	18	18	18	23	25	27	35	45	41	33	32	27	37	33	28.2
	Minimum....	-7	13	-1	6	15	28	21	14	16	7	3	-16	-5	11	10	-6	16	-3	9	-14	-15	0	-8	21	28	20	14	22	3	20	8	6.8
Bardstown §§	Maximum ...	28	30	24	37	45	34	25	30	35	31	30	0	25	40	23	35	33	20	19	26	30	28	32	40	48	50	35	37	25	42	33	31.3
	Minimum....	-5	25	-2	7	24	34	24	14	18	6	23	-14	-3	13	15	0	19	11	-4	-6	-13	9	4	22	30	24	16	27	11	20	13	11.7
Bowling Green§§	Maximum ...	31	33	28	28	33	43	31	33	33	33	38	1	25	35	28	29	29	23	19	26	24	31	34	43	53	49	37	34	34	41	34	32.1
	Minimum....	15	18	6	11	11	20	23	16	24	-4	-8	-15	-12	12	14	7	16	14	2	0	-5	6	13	18	33	30	26	26	15	21	18	11.9
Edmonton	Maximum ...	33	32	34	..	..	..	34	36	31	32	32	33	25	32	31	30	29	30	25	30	19	30	45	40	..	..	51	44	32	46	39	^{e}33.7
	Minimum....	25	12	15	..	..	..	27	28	25	10	-1	-15	-8	10	16	0	20	22	13	1	-15	16	25	24	..	..	25	27	15	27	19	^{e}14.0
Eubank§§	Maximum ...	27	30	20	36	44	46	24	29	31	30	33	4	20	41	24	28	24	17	18	20	28	22	31	39	47	51	49	40	30	44	38	31.1
	Minimum....	-6	-4	0	-1	14	35	23	13	13	2	3	-13	-13	-1	17	3	10	12	4	0	-9	-4	13	14	29	24	24	23	15	15	20	8.9
Frankfort	Maximum ...	22	30	22	32	38	47	40	29	28	27	32	33	15	33	34	29	26	24	18	19	24	24	24	37	44	42	38	34	30	32	32	30.3
	Minimum....	-6	21	4	12	11	35	23	17	22	12	23	-12	-5	14	17	-1	19	11	2	-6	-12	13	11	22	31	23	16	20	13	23	14	12.5
Franklin	Maximum ...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg§§	Maximum ...	31	33	23	39	49	49	25	32	31	31	35	0	22	37	25	28	29	22	22	23	28	27	34	41	50	51	32	35	29	44	32	31.9
	Minimum....	1	8	2	3	18	34	23	12	18	2	4	-13	-14	-2	17	1	8	2	2	-8	-16	-11	13	16	31	22	22	22	12	17	16	8.8
Irvington	Maximum ...	25	31	19	34	42	48	32	30	29	27	26	11	16	29	27	28	26	22	19	19	23	25	25	38	45	49	48	33	26	36	33	29.7
	Minimum....	9	17	3	15	29	32	22	13	12	8	11	-15	-4	11	12	5	20	8	-1	-5	-8	10	1	22	30	28	17	21	11	21	15	11.9
Junction City	Maximum ...	20	30	25	35	38	47	41	30	30	30	32	-5	16	33	40	33	26	25	25	23	22	26	31	38	40	52	52	48	30	41	33	31.8
	Minimum....	-9	19	-3	2	15	37	21	12	20	6	22	-14	-7	14	17	-2	18	12	3	-6	-14	13	15	24	30	20	20	23	14	23	21	11.8
Leitchfield	Maximum ...	25	31	21	37	41	48	33	30	27	29	29	8	17	35	32	30	27	22	22	19	23	26	30	39	50	49	40	32	25	37	30	30.5
	Minimum....	6	20	3	12	26	30	20	11	19	2	8	-16	-8	12	11	1	18	9	-3	-4	-8	8	8	23	30	26	19	22	10	20	14	11.3
Lexington	Maximum ...	24	28	16	32	44	46	28	26	26	27	32	-3	14	36	34	29	23	16	14	16	24	21	25	33	42	47	32	36	23	31	28	27.4
	Minimum....	3	8	-2	10	28	28	18	14	15	10	-4	-14	-3	14	11	12	16	5	4	4	8	12	12	25	29	28	14	20	13	22	15	12.1
Loretto	Maximum ...	31	30	30	50	40	48	41	30	30	27	32	3	14	35	34	35	33	32	30	31	30	26	27	37	46	43	37	34	30	38	33	32.8
	Minimum....	-9	15	-2	6	25	37	21	13	21	5	21	-16	-15	13	6	-2	-6	10	3	-5	-12	0	7	22	30	20	21	20	10	21	15	9.5
Louisville	Maximum ...	26	30	20	34	42	47	29	27	27	26	29	-2	14	27	22	26	24	15	17	20	21	24	29	35	46	39	27	32	27	35	30	27.3
	Minimum....	7	14	3	14	27	29	18	14	16	13	-7	-15	-5	14	12	8	14	5	4	2	-4	13	9	29	32	24	17	18	12	19	12	11.9
Do (Cherokee Park)	Maximum ...	22	29	22	32	40	45	36	28	28	24	28	26	15	27	27	26	25	26	17	17	19	24	24	35	44	42	36	32	27	32	32	28.6
	Minimum....	-5	20	-4	11	17	34	21	14	18	9	21	-16	-8	12	11	-1	17	6	-1	-8	-13	10	2	20	28	21	14	19	9	17	9	9.8
St. John §§	Maximum ...	30	30	20	35	44	46	25	29	32	28	29	-2	23	34	23	29	25	19	12	12	25	27	33	39	50	48	33	32	22	38	33	29.1
	Minimum....	-1	2	3	4	20	35	22	9	12	3	8	-16	-15	-2	12	-5	4	7	-9	-11	-10	0	-6	-5	29	23	18	18	4	7	14	5.6
Scott	Maximum ...	16	22	19	21	36	44	36	36	27	24	27	27	12	22	21	26	22	20	17	18	21	22	20	36	43	40	27	32	26	27	27	26.3
	Minimum....	-3	16	0	7	12	35	20	13	16	10	20	-16	-9	9	13	0	16	1	-4	-12	-14	8	-2	16	28	26	11	15	8	16	7	8.5
Shelbyville §§	Maximum ...	26	28	22	36	41	44	26	28	28	27	30	-2	23	32	20	31	24	15	16	22	24	25	31	37	45	41	32	33	24	34	33	28.3
	Minimum....	-11	-7	-2	-1	15	31	21	14	14	8	8	-16	-16	-3	14	-1	3	5	-5	-10	-16	-11	5	7	28	23	13	14	7	10	10	4.9
Taylorsville	Maximum ...	23	29	22	34	40	45	37	29	28	26	31	31	16	32	34	28	25	23	19	18	25	24	25	37	45	45	45	34	28	33	30	30.4
	Minimum....	-14	20	-10	5	10	36	22	15	21	8	23	-13	-6	14	14	-7	19	8	-11	-16	-18	7	4	23	30	17	15	20	7	21	11	8.9
Williamstown §§	Maximum ...	25	25	20	31	39	44	33	28	29	25	29	22	18	29	20	33	22	17	18	22	24	25	32	37	45	32	30	32	32	28	30	28.3
	Minimum....	-1	0	1	1	11	25	23	13	15	9	10	-15	-16	-1	15	4	9	4	-1	-1	-1	1	2	6	28	28	12	13	10	14	9	7.4
Eastern Division.																																	
Beattyville §§	Maximum ...	27	34	23	35	35	48	30	33	32	37	35	0	22	41	29	30	34	21	21	24	31	22	34	40	53	50	33	45	31	35	33	32.2
	Minimum....	-8	-7	3	-5	9	25	28	19	19	4	4	-7	-8	0	19	0	1	17	9	1	-14	-13	11	19	32	19	20	27	27	27	27	9.8
Berea	Maximum ...	21	21	18	38	45	49	40	40	43	31	40	31	10	35	41	34	28	21	20	22	34	21	34	38	48	54	50	40	32	34	37	33.9
	Minimum....	-6	11	-2	-1	20	39	20	12	19	8	21	-12	-6	6	15	6	19	12	6	-3	-14	14	16	18	22	38	20	22	18	25	24	12.5
Farmers	Maximum ...	20	31	23	33	39	48	43	29	29	29	33	35	19	36	40	34	29	24	17	22	30	26	23	38	45	42	48	40	35	32	34	32.5
	Minimum....	7	5	-8	-3	-3	31	20	15	18	3	16	-13	-7	-11	16	-5	19	11	-4	-9	-16	14	14	14	29	20	17	21	17	23	21	8.0
Maysville§§	Maximum ...	23	24	21	30	38	45	28	29	29	28	38	17	18	33	25	30	25	19	19	20	27	27	32	48	46	35	35	36	26	31	30	29.4
	Minimum...	-5	-5	-8	-5	5	5	25	16	16	8	10	-12	-12	-10	18	-5	-5	11	-5	-14	-16	-14	7	9	30	22	14	15	13	12	17	4.4
Middlesboro	Maximum ...	23	30	29	32	42	45	45	32	31	35	39	40	17	35	39	32	33	31	25	28	34	33	32	38	51	53	48	54	62	61	44	37.8
	Minimum....	14	20	15	1	26	34	25	20	13	3	20	-4	-2	13	22	7	26	20	13	15	11	23	1	25	30	19	36	40	42	28	29	15.6
Mount Sterling§§	Maximum ...	25	28	16	29	44	46	46	28	27	27	32	-5	22	38	23	32	26	16	17	20	25	24	31	39	45	44	35	37	25	31	34	29.3
	Minimum....	8	-5	4	2	10	26	25	15	15	8	13	-13	-11	-4	17	5	8	10	0	-7	-11	-3	13	14	29	24	15	16	16	16	19	7.9
Richmond §§	Maximum ..	20	29	17	34	38	46	26	27	30	27	32	-4	20	34	22	31	23	23	20	19	25	23	26	38	45	46	26	36	32	32	29	28.1
	Minimum....	2	18	2	5	24	32	22	16	21	11	21	-13	-6	16	12	9	15	12	5	1	-3	12	15	22	30	26	20	23	22	22	10	13.4
Weeksbury	Maximum ...	24	30	28	32	41	52	39	31	43	36	34	48	23	40	44	38	35	29	26	22	36	31	31	40	50	31	55	62	55	35	38	37.4
	Minimum....	12	20	5	1	15	35	24	19	21	10	12	-1	-2	16	23	13	23	19	12	12	-1	21	17	21	32	17	32	31	28	24	33	17.5
Williamsburg §§	Maximum ...	28	34	23	37	51	38	28	32	30	35	43	7	27	43	29	34	34	24	34	24	34	25	35	45	45	45	52	48	48	44	37	35.3
	Minimum....	4	11	14	4	18	37	22	21	19	1	2	-6	-6	-3	23	10	12	20	12	8	-11	-10	8	20	32	23	32	35	28	30	26	14.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
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CLIMATOLOGICAL DATA

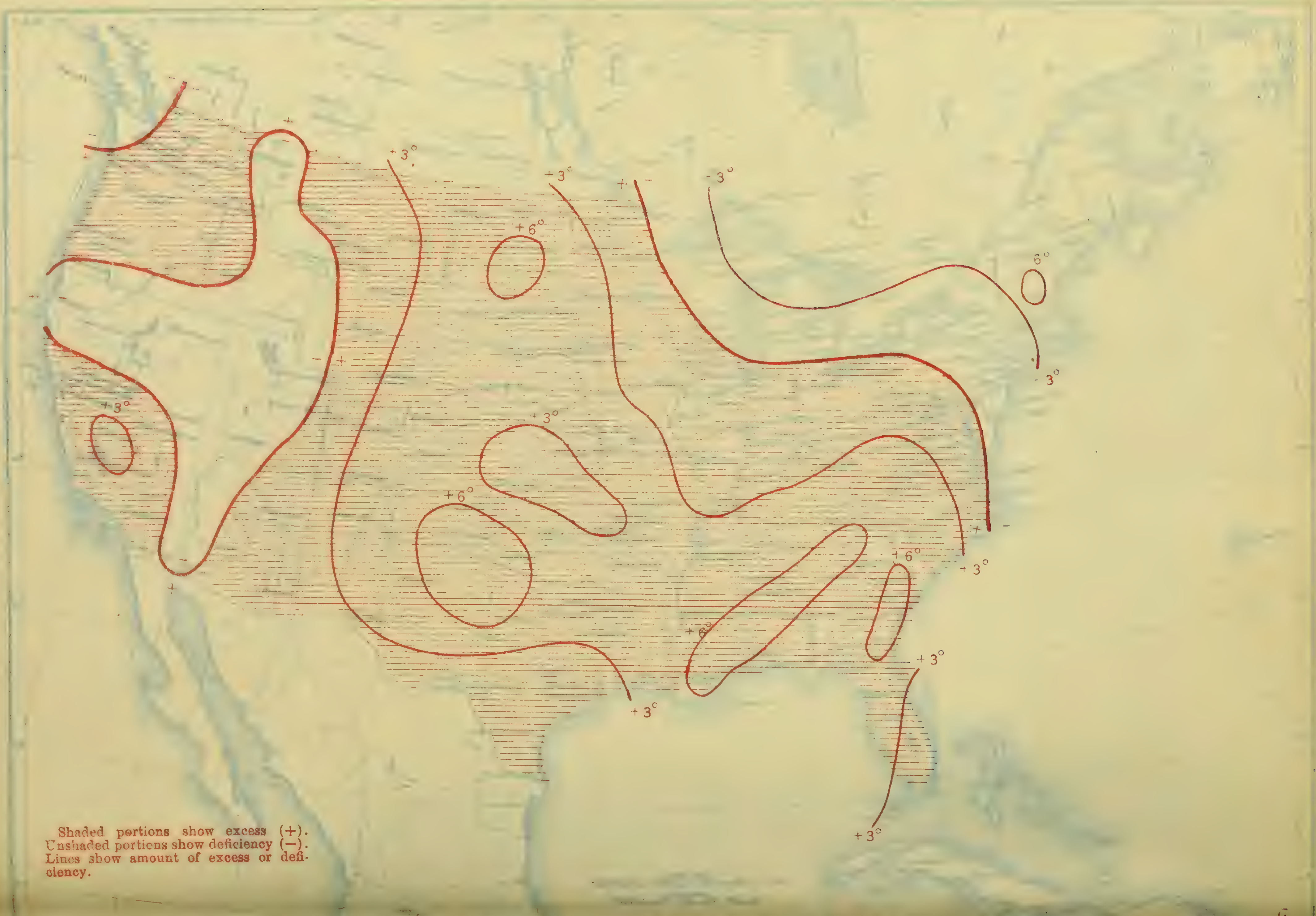
KENTUCKY SECTION

FEBRUARY, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 19, 1918

Departure of the Mean Temperature from the Normal, February, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. LOUISVILLE, KY., FEBRUARY, 1918. No. 2

GENERAL SUMMARY.

The temperature for the State averaged above normal, the rst time for any month since January of last year. The eather conditions during the first five days of February were milar to those prevailing during January preceding; but on ie 6th there was a decided reaction to warmer, the 24-hour rise temperature being from 40 to 50 degrees. With this warm ave the character of the winter seemed to undergo a complete iange, and during the rest of the month mild weather prevailed ith the exception of only two days, the 20th and 21st. On any days the minimum temperature was above freezing, while e maximum temperature rose above 60° on about 10 days and ove 70° on several days Maximum temperatures of 70° to)° were general over the State on the 28th, and the highest on at date, 83°, has been exceeded only once in February since ate records were established. The snow had practically dispeared by the 9th. The winter grains came from under the ow in much better condition than when covered early in ecember, and during the mild weather that followed the disaparance of the snow considerable growth occurred. The hard eze of the 20th-21st apparently did not injure wheat to any tent; and, although the plants were small in size, their aparance at the end of the month indicated a vigorous and althy condition. The mild weather contributed to the relief the coal famine in this section; also made possible the gathing of much corn that had been caught out in the fields by e heavy snow, and facilitated the handling and moving of acco.

Precipitation averaged only about one-half the normal amount, ich was favorable for outdoor activities and also for the crops, the soil had received sufficient moisture from the melting ow early in the month. Thunderstorms occurred on the 12th, th, 19th, and 25th in the central counties.

PRESSURE.

During the month six high and eight low pressure formations ssed over or near the section, influencing and largely controlg the current weather conditions. Both the "lows" and ighs" were mostly of unusual energy and rapid in developent and movement. The "lows" occurred as follows: 3d, 6th, th, 12th, 14-15th, 19th, 25th, and 27-28th. "Highs" domited during the 1st-2d, 3d (p. m.)-5th (a. m.), 9-10th, 15-17th, th-23d, and 26th. On the 21st at 9 a. m. the barometric essure at Louisville, reduced to sea-level, was 30.92 inches, highest on record at this station.

The mean sea-level pressure, determined from the records of o stations, was 30.15 inches. The extremes were 30.92 ches at Louisville on the 21st, and 29.21 inches at Lexington the 25th.

TEMPERATURE.

The average temperature for the State, based on the reports of stations, was 39.3°, which is 3.7° above normal. On four the first five days minimum temperatures were near or below o, the 4th and 5th being the coldest days of the month. The riods 7-16th and 24-28th were especially warm, with maximum nperatures generally between 60° and 70°. The monthly tremes were 83° at Bowling Green on the 28th, and −8 at chorage on the 5th.

PRECIPITATION.

The average precipitation for the State, determined from the reports of 55 stations was 2.04 inches, which is 1.56 inches below normal. The distribution over the State was unusually irregular for a winter month, ranging between 0.49 inch at Cherokee Park, Jefferson county and 4.57 inches at Edmonton. Only about one inch occurred in the extreme western counties and in the lower Green River basin. Over the rest of the State amounts were generally between two and three inches. Snowfall was very light, many stations reporting only a trace. Moderate rains were general in the central and eastern counties on the 8-9th, in the western and central counties on the 12th, and over the State on the 19-20th.

WIND.

The total wind movement at Louisville was 10,294 miles, and at Lexington 11,731 miles, with average hourly velocities of 15.3 and 17.5 miles respectively. The maximum velocity for five minutes at Louisville was at the rate of 65 miles from the west on the 25th, and at Lexington 60 miles from the southwest on the 12th. This is the highest wind velocity on record for Louisville for February. Winds reaching or exceeding 40 miles per hour occurred on the 6th, 12th, 14th, 15th, 19th, 25th, 26th, and 28th. The total wind movement was unusually high for this month.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 79 per cent, at 12 noon 63 per cent, and at 7 p. m. 60 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 53 and at Lexington 39.

MISCELLANEOUS.

February 12th and 25th.—High wind caused considerable damage to telephone lines, signs, plate glass windows, etc., at Louisville and vicinity.

Rivers.—The situation in the Ohio River at the beginning of the month was one of extreme gravity. A heavy gorge, 15

(Continued on next page.)

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	34.1	− 1.5	74	3	1.91	−1.69	
1890	45.6	+10.0	86	16	7.98	+4.38	
1891	42.2	+ 6.6	76	0	4.72	+1.12	
1892	42.2	+ 6.6	70	11	2.92	−0.68	
1893	37.7	+ 2.1	70	3	4.40	+0.80	
1894	34.6	− 1.0	74	2	4.66	+1.06	
1895	25.9	− 9.7	80	18	0.66	−2.94	5
1896	37.4	+ 1.8	81	−12	3.06	−0.54	9
1897	39.8	+ 4.2	76	8	5.75	+2.15	11
1898	37.4	+ 1.8	77	− 3	1.61	−1.99	6
1899	26.2	− 9.4	71	−33	3.97	+0.37	11
1900	32.5	− 3.1	76	− 9	4.68	+1.08	12
1901	32.4	− 3.2	71	1	1.27	−2.33	6
1902	27.9	− 7.7	69	− 3	1.30	−2.30	7
1903	37.5	+ 1.9	75	−16	7.28	+2.68	9
1904	35.2	− 0.4	75	− 2	2.32	−1.28	7
1905	27.9	− 7.7	67	16	2.44	−1.16	9
1906	34.7	− 0.9	75	12	1.81	−1.79	7
1907	35.7	+ 0.1	73	10	3.06	−0.54	9
1908	35.6	0.0	70	2	5.56	+1.96	13
1909	42.4	+ 6.8	75	− 8	8.17	+4.57	11
1910	32.9	− 2.7	66	−12	4.70	+1.10	10
1911	42.0	+ 6.4	80	11	3.25	−0.35	9
1912	29.7	− 5.9	68	14	3.08	−0.52	7
1913	34.8	− 0.8	77	− 2	2.94	−0.66	7
1914	32.2	− 3.4	69	2	4.14	+0.54	11
1915	41.9	+ 6.3	75	13	1.74	−1.86	8
1916	35.0	− 0.6	72	− 4	2.99	−0.61	9
1917	34.8	− 0.8	80	− 9	3.51	−0.09	8
1918	39.3	+ 3.7	83	− 8	2.04	−1.56	7

Climatological data for February, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	38.0	+2.8	82	28	−2	5	52	1.57	−1.81	0.66	......	6	11	12	5	s.	Mrs. Della M. Davis.
Blandville	Ballard	445	36	40.4	+4.0	79	28	5	4+	39	1.01	−3.52	0.43	1.5	4	7	15	6	sw.	E. W. Horr.
Calhoun	McLean	437	14	41.0	+3.7	79	28	−1	4+	46	1.14	−2.26	0.38	T.	5	4	14	10	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	38.6	+2.2	81	28	1	4	47	1.10	−2.90	0.45	0.5	6	17	1	10	s.	Brick Southworth.
Greenville	Muhlenburg	519	1	42.0	......	80	28	2	4	48	2.05	......	0.54	5.0	6	7	14	7	s.	C. R. Lovell.
Henderson	Henderson	......	9								1.32	−1.43	0.48	T.	7					W. W. Shelby.
Hopkinsville	Christian	524	21	43.8	+6.8	80	28	3	5	38	0.86	−3.03	0.42	3.0	4	15	7	6	w.	W. F. Randle.
Marion	Crittenden	571	19	40.6	+4.9	79	28	−1	5	44	1.04	−2.33	0.63	T.	3	11	9	8	s.	B. C. Paris.
Mayfield	Graves	364	8	[c]36.9	......	79[i]	28	1	5	45[i]	1.30	......	0.60	2.0	3	8	10	10	s.	J. N. Davis.
Owensboro	Daviess	479	21	37.2	+2.5	79	28	−3	5	48	1.02	−2.23	0.48	T.	5	11[a]	7[a]	9[a]	sw.	Henry S. Berry.
Paducah	McCracken	341	18	42.4	+6.4	81	28	5	4+	49	1.10	−2.50	0.61	1.0	4	19	1	8	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8																	Ray Baker.
Russellville	Logan	590	6	41.2	......	79	28	5	4	46	2.00	......	1.00	1.6	5	16	6	6	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	41.4	+2.9	73	28	10	4+	41	2.80	−1.70	2.00	T.	6	13	6	9	s.	W. W. Hicks.
Anchorage	Jefferson	700	17	37.7	+5.6	78	28	−8	5	39	2.27	−0.87	1.34	T.	6	15	3	10	sw.	C. E. Barret.
Bardstown	Nelson	637	21	37.6	+3.1	78	28	0	5	50	2.04	−1.87	0.70	......	7	9	5	14	sw.	Chas. M. Talbott.
Bowling Green	Warren	500	27	41.6	+4.4	83	28	6	4+	50	1.58	−2.57	1.04	1.0	7	18	7	3	n.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0								2.47	......	0.98	1.4	10					James H. Young.
Burnside	Pulaski	773	25								2.93	−1.33	1.33	......	9					C. L. Hurt.
Carrollton	Carroll	492	18								1.40	−1.48	0.40	......	9					Charlie Oliver.
Cloverport	Breckenridge	375	4								1.33	......	0.51	T.	5					W. A. Cockerill.
Edmonton	Metcalfe	600	24	[d]43.8	+7.4	77[d]	28	5[d]	6	47[d]	4.57	+0.16	2.01	T.	7	9[d]	10[d]	5[d]	n.	P. W. Ray.
Eubank	Pulaski	1177	23	39.4	+6.1	74	28	3	5+	41	2.87	−1.22	1.85	T.	8	8	4	16	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	39.5	+4.7	76	28	0	5	37	3.13	−0.43	1.00	......	10	10	6	12	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22																	
Greensburg	Green	581	25	38.2	+4.5	78	28	2	5	49	1.77	−2.25	1.02	T.	10	9	6	13	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15								1.67	−1.79	0.75	......	10					Miss Lulu Wood.
Irvington	Breckenridge	646	20	39.6	+5.3	78	28	−3	5	37	1.79	−1.54	1.01	T.	5	9	7	12	sw.	W. J. Piggott.
Junction City	Boyle	985	24	39.6	+6.5	77	28	2	5	42	2.63	−1.00	0.80	0.5	13	8	10	10	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	39.0	+5.0	79	28	−2	5	38	1.32	−2.46	0.62	0.5	6	7	13	8	sw.	John E. Stone.
Lexington	Fayette	989	30	37.9	+2.3	75	28	−1	4	38	1.92	−1.31	0.88	0.1	9	8	9	11	sw.	U. S. Weather Bureau.
Loretto[‡‡]	Marion	681	19	40.2	+6.3	78	28	2	5	42	2.00	−1.05	0.50	......	7	13	5	10	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	37.9	+1.3	77	28	0	4	37	1.90	−1.85	1.09	T.	6	6	12	10	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	38.2	......	78	28	−4	4+	41	0.49	......	0.23	T.	4	11	6	11	sw.	Wm. I. Hunt.
St. John	Hardin	777	21	35.9	+2.9	78	28	−5	5	50	2.66	−1.32	0.63	2.0	12	13	3	12	......	Sisters of Loretto.
Scott[•]	Kenton	900	20	35.7	+5.0	74	28	−8	5	40	1.81	−0.94	0.32	T.	9	8	7	13	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	34.8	+0.8	75	28	3	4	44	2.17	−1.63	0.60	T.	8	13	4	11	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	38.8	+4.4	76	28	−3	5	38	2.61	−1.16	0.64	T.	10	8	8	12	sw.	E. D. Bourne.
Williamstown	Grant	943	15	35.4	+4.4	75	28	−5	5	47	2.10	−0.87	0.93	0.1	7	8	11	9	......	Miss Rose Carter.
Woodbury	Butler	533	0								2.14	......	0.80	2.0	6					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	38.8	+4.3	77	28	3	5	56	2.88	−1.22	1.26	1.0	12	7	5	16	sw.	A. H. Bowman.
Berea	Madison	1070	16	41.1	+5.3	76	28	3	5	43	2.35	−0.82	0.70	0.8	9	15	8	5	sw.	C. F. Rumold.
Catlettsburg[‡]	Boyd	534	29								2.65	−0.96	0.95	1.0	9					Forester Farley.
Cynthiana	Harrison	684	0								3.32	......	1.38	......	9					P. H. Kehoe.
Falmouth	Pendleton	600	29								3.24	−0.12	1.45	T.	8	10	2	16	......	J. V. Oldham.
Farmers	Rowan	668	10	38.0	+2.4	79	28	−2	4	44	2.12	−1.05	0.88	......	8	14	4	10	w.	Durwood Cassity.
Jackson	Breathitt	776	6								2.62	......	1.05	0.5	8					Jas. L. McCoy.
London	Laurel	1190	3								2.52	......	1.05	T.	12					C. R. Lee.
Louisa	Lawrence	584	14								2.19	−1.49	0.87	T.	7					Miss Carrie S. Adams.
Manchester	Clay	1400	8								2.00	−0.94	1.31	1.0	7					Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	34.8	+1.8	76	28	5	5	48	2.19	−1.14	0.90	T.	8	16	1	11	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	44.4	+5.5	71	28	8	5	39	2.43	−2.49	1.05	2.0	10	14	12	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	36.0	+2.7	75	28	0	5	46	2.39	−1.88	1.13	T.	8	13	1	14	w.	W. R. McKee.
Pikeville	Pike	634	12								2.20	−1.31	1.20	T.	4					I. M. Williams.
Richmond	Madison	926	24	39.3	+4.4	72	28	3	4+	35	1.47	−2.17	0.35	1.0	9	12	7	9	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	44.3	......	79	28	6	5	44	2.18	......	1.26	......	3	12	8	8	......	O. A. Lund.
Williamsburg	Whitley	939	20	40.7	+3.2	78	28	8	5+	53	1.65	−1.84	0.75	1.0	8	6	7	15	w.	N. C. Jones.
State averages and extremes				39.3	......	83	28	−8	5	56	2.04	......	2.01	0.6	7	11	7	10	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

+ Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

[‡] Post-office address, Normal, Ky.; [‡‡] Nerinx, Ky.; [•] Covington, Ky.

miles long, in the Big Sugar Creek bend about 81 miles above Louisville, had backed the water above flood stage from Rising Sun, Ind., to above Cincinnati, a stage of 61.0 feet occurring at Cincinnati on the 2d. The difference in water level above and below this ice dam was 30 feet. February 1st, about noon, the ice field at Madison moved out causing about $20,000 loss to local craft. About 9:50 a. m. on the same date the shore ice at Louisville passed over the dam carrying away several small boats, the loss being about $20,000; and about 3 p. m the ice immediately above Louisville moved out causing a loss of about $25,000. These ice floes damaged the Government dams at Louisville and West Point, and passing down formed a gorge at Evansville about the 5th which held until the 13th, causing flood stage at that place during most of that period. The gorge at Big Sugar Creek broke on the 12th, and moved out freely, as most of the ice below this gorge had already gone out. There was some temporary gorging below Cloverport which caused flood stage at that place on the 15th, continuing above flood stage until the 17th. At Evansville the river remained above flood stage until the end of the month, and stages at that time were still high in all other districts bordering this State.

Daily Precipitation for February, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division																																	
Beaver Dam	G									.05			.40							.30	.66						12		.01	T			1.57
Blandville	M		.13										.42							.43								.03					1.01
Calhoun	G		T										.21							.33	20					T	.38	.02					1.14
Earlington ‖	G			.02									.35							16	.45						10		.02				1.10
Greenville	G		.54							.02			.45							.35	.49							.20					2.05
Henderson	O									.20			20							.12	18					.15	12		.05				1.32
Hopkinsville	C			.14									.42				T.			.10	.20								T				0.86
Marion	O		T.										.26				T			.63						15		T.					1.04
Mayfield ‖	M		.20										.40							10		.60											1.30
Owensboro ‖	O			T.				T.					.15				T.			.13	.48						20		.06				1.02
Paducah	O		.08										.37							.61								.04					1.10
Princeton	G																																
Russellville ‖	G			.16									.71				.04			.09	1.00												2.00
Central Division.																																	
Alpha	C		.20				.15	T.	2.00	.10			.15		.20		T.						T.										2.80
Anchorage	O		T.						.08				.46		.11					1.34	T.				.07	.21		T.					2.27
Bardstown ‖	S								.15	.16			.27			.26				.36	.70						14						2.04
Bowling Green	G			.30				T.		.05			.07				.03			.07	1.04		.02										1.58
Brownsville ‖	G			.14				T.	.03	.06			.49	.30		.05				.21	.98				.04		.17						2.47
Burnside ‖	C			.30				.20	.32		.15		T.	.15		.05				.05	1.33		T.	T.			.38						2.93
Carrollton ‖	O			.02					.01	.27			.10	.11						.10	.37					.40			.02				1.40
Cloverport ‖	O								T.		T.		.28	T.		T.				.31	.51	T.					.20		.03				1.33
Edmonton	G	T.					T.			.15			.40			.90	.07			.80	2.01		T.				.24						4.57
Eubank ‖	C			.10				.22			.16			.12		.20				.02	1.85	T.					.20						2.87
rankfort	K								.17	.14	T.		.20	.21		.55		T.		.48	1.00					11	.25		.02				3.13
ranklin	G																																
reensburg ‖	G			.12				.01	.09	.08			.21			.06				.15	1.02		.01				.12						1.77
igh Bridge ‖	K						T.	.02	.15	.20	T.		.05	.10		.03				.10	.75					.05	.22						1.67
rvington	O		T.							.10			.35							1.01	T.					.27		.06					1.79
unction City	K		.05				.08			.23			.33		.09	.04				.47	.80			.02	.01	.02	45	.04					2.63
eitchfield	G		.05						.06	.02			.35							.62						.22		T.					1.32
exington ***	K		.01	T.			.03		.15	.29			.19		.20		T.	T.		.88	T.	T.			.07	.10		T.					1.92
oretto	S								.30	.20									T.	.40	.20				T.	.30	.50	.10					2.00
OUISVILLE***	O		T.						.07	.10			.35		T.			T.	T.	1.09	T.				.02	.27		T					1.90
Do. (Cherokee Park)	O												.09			T.		T.		.23					.03	.14		T.					0.49
. John ‖	S			.20					.04	.11			.40	23		.25	T.			.45	.63				.08	.02	.15		.10				2.66
ott	L			T					.05	14			25	T.		.30		T.		.32	.26					.28	.20	.01					1.81
helbyville ‖	S			T.					.13	.11			.24	.17		T.				.56	.60					.09	.24						2.17
aylorsville	S		T.	T.			T.		.15	.09	T		.40			.42	T	T.		.64	.39				.22	.04	.24	.02					2.61
illiamstown ‖	L			.01						.09				.15		T.				.15	.93					.01	.76		T				2.10
oodbury ‖	G			.20					.12				.59							.23	.80						.20						2.14
Eastern Division.																																	
eattyville	K			.20	T.			.05	.03	.27	.23			.10		.25			.03		1.26			.08		.08	.30						2.88
rea	K		.02				.12		.70							.50	T.			.23	.48	T.	12		06	.12							2.35
atlettsburg ‖	B			.10						.14	.34			.03		.26				.13	.95					.20	.50						2.65
ynthiana ‖	L								.05	.50	T.		.15	.12	.45					.20	1.38				.05	.42							3.32
almouth ‖	L			T.					.05	.23			.11	.20						.45	1.45	T.					.73		.02				3.24
armers	L			.15					.25	.30			.10			.27				.38	.50						.17						2.12
ckson ‖	K			.12				.08		.18	.15					.45				T.	1.05		T.	.04		T	.55						2.62
ondon ‖	C			.35	.04			.10	.25		.10			.10						.06	1.05		.02	.05			.40						2.52
uisa ‖	B		T.	T.				.04		.29	.21					.13					.87					.43	.22						2.19
anchester ‖	K							.12			.14									.21	1.31		.07	.03			.12						2.00
aysville ‖	O			T.	T.			T.		.40	.05		T.	.03		.02		T.	T.	.18	.90					.11	.50		T.				2.19
iddlesboro	C		.17				.10		.11	.09			.12			.14	.14			.06	1.05						.45						2.43
ount Sterling	L			.05				.03	.09	.50	.07					.22	T.			T.	1.13				T.		.30		T				2.39
keville	B			T.	T.					.20						.50					1.20						.30						2.20
ichmond ‖	K			.10	T.		T.	.06	.27	T.	.23	T.	.06			.12				.05	.35	T.				T.	.23	T.					1.47
eeksbury	B						.42			.50											*	1.26											2.18
illiamsburg ‖	C			.10				.05			.05		T.	.08		.20	.07			T.	.75			T.		T.	.35						1.65

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

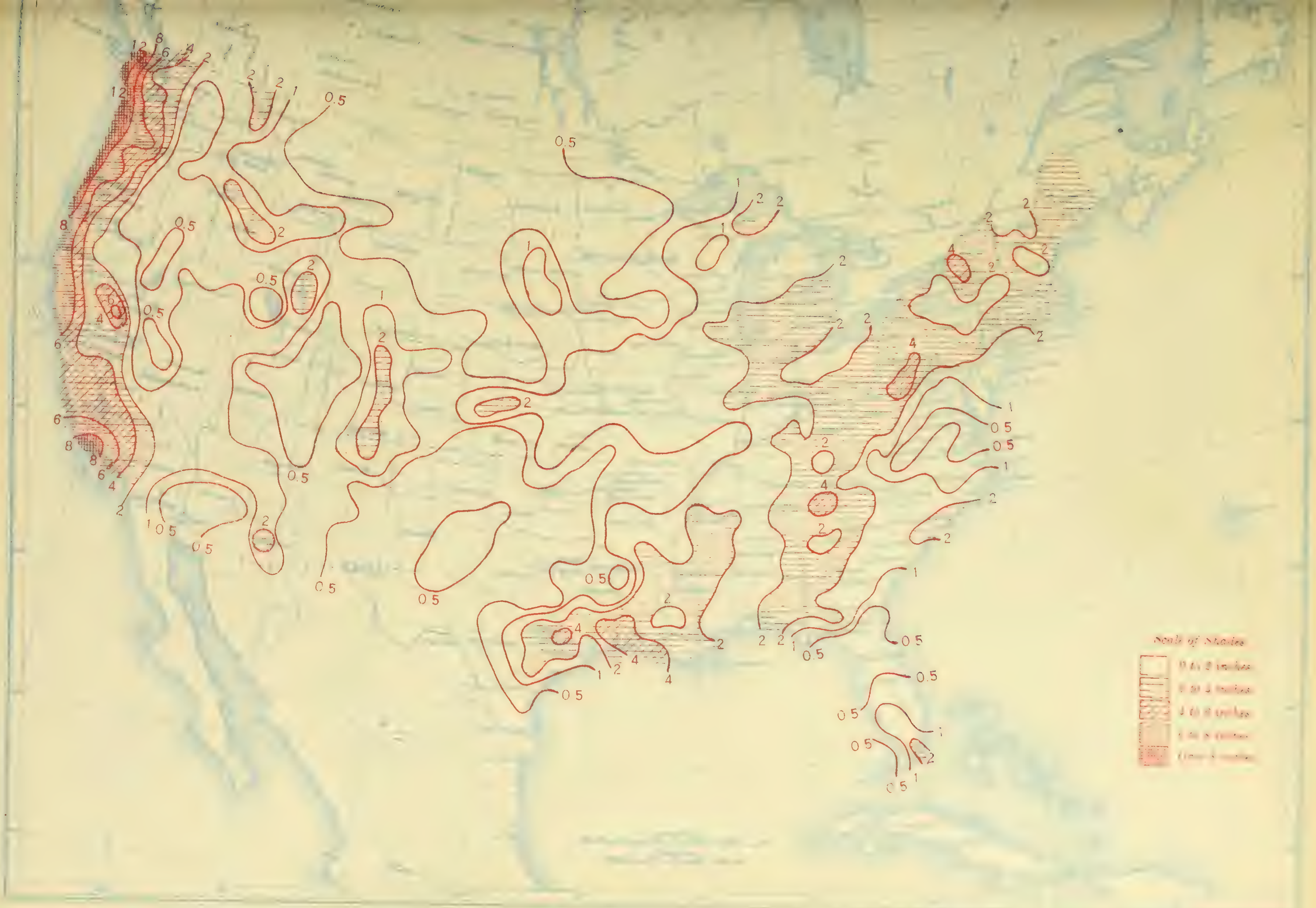
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for February, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	27	31	34	20	45	50	60	70	57	53	62	62	53	70	38	44	38	59	62	30	30	40	58	68	71	49	60	82	..	..	..	50.8
	Minimum	12	11	10	2	-2	27	35	48	50	29	32	40	32	34	33	26	25	22	25	24	12	13	23	27	41	26	21	30	..	..	..	25.3
Blandville	Maximum	20	29	38	20	44	50	46	63	59	51	61	62	62	72	56	46	37	55	64	46	25	41	51	71	76	46	59	79	..	..	..	51.0
	Minimum	12	11	24	5	5	42	34	44	33	29	35	47	36	43	30	29	22	24	46	19	11	24	29	50	45	25	34	46	..	..	..	29.8
Calhoun	Maximum	25	27	32	32	33	47	47	67	64	54	62	61	68	70	69	48	38	58	61	63	36	40	59	66	71	71	48	79	..	..	..	53.4
	Minimum	12	12	26	1	-1	32	35	38	34	28	34	50	33	45	30	27	24	22	49	23	11	23	26	49	45	25	28	42	..	..	..	28.6
Earlington §§	Maximum	20	34	34	18	48	50	58	71	39	55	65	63	67	71	37	46	40	60	64	29	28	43	61	69	73	49	64	81	..	..	..	51.3
	Minimum	11	12	16	4	1	12	39	38	39	30	32	43	32	33	33	30	25	23	27	21	13	15	25	38	43	28	28	37	..	..	..	26.0
Greenville	Maximum	25	31	36	28	36	47	53	71	64	55	62	64	63	71	70	47	38	58	64	64	25	41	60	70	74	74	53	80	..	..	..	54.4
	Minimum	14	11	27	2	8	34	38	38	36	30	35	50	33	48	31	28	25	23	50	21	12	25	22	49	44	26	26	44	..	..	..	29.6
Hopkinsville	Maximum	29	32	38	35	41	47	52	72	65	57	64	63	66	72	70	50	41	60	64	50	33	40	60	70	72	55	58	80	..	..	..	54.9
	Minimum	16	17	29	7	3	36	39	44	36	32	34	51	34	47	36	32	26	24	50	23	15	37	38	48	48	27	37	52	..	..	..	32.8
Marion	Maximum	24	31	33	26	40	47	49	67	62	49	62	60	63	71	68	45	38	57	63	63	25	41	60	67	72	53	49	79	..	..	..	52.3
	Minimum	12	7	20	3	-1	40	34	43	28	29	39	49	31	51	31	27	24	24	52	19	12	22	27	46	44	26	32	42	..	..	..	29.0
Mayfield §§	Maximum	21	32	41	23	46	46	55	65	39	52	..	..	..	..	..	..	..	..	31	..	27	42	56	72	75	42	65	79	..	..	..	[i]47.8
	Minimum	9	14	20	6	1	11	37	39	39	30	30	33	40	33	31	31	23	24	30	14	21	14	26	31	54	24	27	35	..	..	..	26.0
Owensboro §§	Maximum	19	28	33	18	45	45	45	60	35	49	59	58	59	70	35	39	36	58	63	27	32	38	57	63	70	46	61	79	..	..	..	47.4
	Minimum	9	4	22	-1	-3	31	33	36	35	29	30	47	32	48	32	29	25	24	33	20	12	22	26	45	42	26	30	42	..	..	..	27.1
Paducah (Lone Oak)	Maximum	29	30	35	32	45	50	48	67	67	55	64	63	65	75	74	48	37	57	67	68	28	40	55	67	79	58	55	81	..	..	..	55.0
	Minimum	13	12	24	5	5	38	36	33	34	29	36	48	38	53	30	28	24	25	52	19	12	23	30	37	44	26	33	45	..	..	..	29.7
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	24	36	37	19	44	56	71	72	56	62	63	63	65	72	42	49	37	60	64	29	36	50	63	71	70	54	70	79	..	..	..	54.1
	Minimum	15	16	22	5	6	10	41	46	52	31	32	48	33	34	36	31	26	24	26	24	14	14	32	36	49	28	29	34	..	..	..	28.4
Central Division.																																	
Alpha	Maximum	33	35	44	29	39	45	56	67	59	51	63	65	63	70	52	55	40	58	60	56	34	35	53	63	72	61	55	73	..	..	..	53.1
	Minimum	11	8	29	10	10	33	44	39	40	35	32	45	37	39	35	29	30	25	36	29	19	30	28	33	31	33	27	38	..	..	..	29.8
Anchorage	Maximum	21	29	34	19	29	45	45	53	55	51	64	60	58	70	64	43	35	57	63	61	24	37	57	59	67	54	49	78	..	..	..	49.3
	Minimum	8	2	19	-3	-8	28	34	33	34	28	29	49	31	38	31	26	21	21	50	22	11	22	21	45	45	27	25	44	..	..	..	26.1
Bardstown §§	Maximum	20	37	40	18	45	46	51	68	56	54	65	63	68	75	40	51	37	64	65	35	28	44	60	62	71	49	59	78	..	..	..	51.8
	Minimum	10	10	14	1	0	4	39	37	46	29	30	34	31	31	34	28	26	21	22	24	12	13	20	22	41	26	25	28	..	..	..	23.5
Bowling Green §§	Maximum	28	36	39	30	43	44	55	73	61	56	64	65	69	69	43	53	40	63	63	46	36	44	61	71	71	50	72	83	..	..	..	54.6
	Minimum	16	18	23	6	6	13	40	41	54	31	33	34	36	41	34	31	27	24	32	25	15	19	26	39	48	28	25	33	..	..	..	28.5
Edmonton	Maximum	..	..	..	29	39	46	57	71	66	..	66	65	64	71	67	55	37	62	65	65	30	41	55	64	67	73	58	77	..	..	..	[d]57.9
	Minimum	..	..	..	6	5	34	43	35	39	..	31	47	33	37	35	32	26	23	51	24	16	26	27	21	21	26	24	48	..	..	..	[d]29.6
Eubank §§	Maximum	24	39	35	18	40	44	54	68	59	52	64	65	63	72	56	54	32	60	63	29	40	45	65	63	72	53	56	74	..	..	..	52.1
	Minimum	14	4	23	5	3	3	36	38	43	32	32	34	32	32	40	34	25	22	26	27	17	22	30	33	50	27	24	41	..	..	..	26.8
Frankfort	Maximum	30	31	36	27	30	44	46	55	56	49	61	61	58	71	67	46	38	57	64	62	28	37	55	59	68	65	53	76	..	..	..	51.1
	Minimum	10	5	26	1	0	28	33	32	38	30	31	45	37	35	34	30	25	23	49	25	13	24	23	42	46	30	26	43	..	..	..	28.1
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	23	39	40	19	45	46	57	71	59	53	66	63	64	72	42	54	36	63	61	31	29	41	60	64	72	46	53	78	..	..	..	51.7
	Minimum	14	14	20	4	2	7	38	34	43	30	28	37	32	35	35	30	25	20	27	25	14	15	18	25	43	27	23	29	..	..	..	24.8
Irvington	Maximum	28	30	35	23	30	46	47	62	57	51	60	60	57	69	67	43	35	58	62	57	27	37	57	60	68	44	48	78	..	..	..	49.9
	Minimum	11	9	23	-1	-3	30	37	43	35	29	36	52	34	48	33	29	25	21	50	21	12	27	27	45	44	27	31	43	..	..	..	29.2
Junction City	Maximum	29	33	33	27	32	44	54	67	61	53	64	62	60	73	53	37	50	63	62	52	27	40	57	63	72	68	55	77	..	..	..	52.4
	Minimum	12	13	27	4	2	30	38	33	38	31	33	42	30	32	30	30	27	31	35	25	15	24	19	30	33	26	22	38	..	..	..	26.8
Leitchfield	Maximum	18	30	37	23	33	44	52	67	60	52	62	62	60	69	60	47	35	59	60	50	28	38	57	65	71	46	52	79	..	..	..	50.6
	Minimum	11	12	23	-1	-2	30	37	37	35	28	33	48	32	41	30	27	24	22	48	20	12	24	21	45	42	25	26	41	..	..	..	27.5
Lexington	Maximum	16	34	36	15	33	42	49	63	56	47	61	60	57	70	50	46	30	57	65	45	26	37	55	58	70	41	51	75	..	..	..	48.0
	Minimum	7	16	15	-1	0	33	38	45	31	28	35	44	37	44	29	28	21	21	45	18	9	26	26	46	32	27	32	45	..	..	..	27.8
Loretto	Maximum	30	30	41	29	32	46	50	70	67	53	64	68	62	76	61	50	45	62	65	58	36	35	50	61	70	63	53	78	..	..	..	53.8
	Minimum	6	9	20	10	2	30	40	30	38	30	37	48	30	38	33	27	25	20	40	24	12	12	20	28	45	26	24	39	..	..	..	26.5
Louisville	Maximum	18	30	34	13	38	45	46	62	60	50	62	58	57	68	54	41	33	57	63	36	26	39	56	59	67	43	48	77	..	..	..	47.9
	Minimum	11	10	13	0	1	38	35	41	30	28	39	44	38	44	31	28	22	23	36	18	11	24	29	51	32	27	32	45	..	..	..	27.9
Do. (Cherokee Park)	Maximum	28	28	34	24	27	45	44	56	56	49	61	60	57	70	66	42	35	55	63	62	25	38	55	60	67	64	48	78	..	..	..	49.9
	Minimum	8	4	21	-4	-4	24	34	32	35	27	35	48	36	42	32	26	22	20	50	21	9	23	23	45	41	26	25	40	..	..	..	26.5
St. John §§	Maximum	18	35	36	12	45	43	49	65	53	52	61	61	60	67	38	49	34	58	61	33	27	41	56	60	66	46	55	78	..	..	..	48.5
	Minimum	11	9	11	-2	-5	2	37	37	44	28	29	35	32	36	31	27	25	22	24	23	12	13	21	31	40	25	25	30	..	..	..	23.3
Scott	Maximum	18	23	33	20	20	43	41	46	51	45	57	58	53	70	64	41	32	51	61	59	25	37	54	60	65	62	49	74	..	..	..	46.9
	Minimum	4	-1	20	-4	-8	20	33	28	34	25	35	43	34	37	28	25	20	17	44	19	6	20	24	43	48	26	26	41	..	..	..	24.5
Shelbyville §§	Maximum	20	33	34	13	41	42	48	59	47	49	64	60	59	69	36	45	35	56	62	30	27	38	56	59	67	45	54	75	..	..	..	47.2
	Minimum	7	4	7	-3	0	-2	35	35	42	27	27	34	35	35	32	26	23	20	22	23	10	11	21	25	43	27	26	32	..	..	..	22.3
Taylorsville	Maximum	28	31	35	25	29	44	47	54	58	50	61	60	58	70	66	46	36	58	64	62	26	38	55	60	68	65	50	76	..	..	..	50.7
	Minimum	10	5	25	0	-3	21	35	31	37	29	29	46	33	37	34	28	27	23	50	24	12	24	20	40	41	27	24	43	..	..	..	26.9
Williamstown §§	Maximum	32	34	35	27	42	42	45	53	45	45	62	59	58	71	51	46	33	51	60	44	33	39	55	58	65	46	52	75	..	..	..	48.5
	Minimum	6	6	7	-3	-5	-3	33	30	35	28	27	36	35	36	33	26	20	18	33	23	8	9	24	39	41	28	28	30	..	..	..	22.4
Eastern Division.																																	
Beattyville §§	Maximum	28	47	44	21	43	35	58	71	62	58	69	60	67	68	66	47	38	64	65	35	33	44	63	69	75	49	63	77	..	..	..	54.2
	Minimum	17	18	23	8	3	4	34	30	33	34	26	26	26	26	28	28	28	17	18	34	19	19	19	18	44	31	21	21	..	..	..	23.3
Berea	Maximum	27	38	43	20	35	42	57	71	61	52	65	65	66	71	65	56	39	62	64	61	28	34	64	64	72	66	57	76	..	..	..	54.3
	Minimum	12	24	18	4	3	20	20	36	38	35	38	50	50	44	33	30	22	21	34	25	14	20	21	22	53	28	25	41	..	..	..	27.9
Farmers	Maximum	30	33	39	33	28	47	48	52	42	52	66	54	63	68	54	52	37	58	62	58	30	39	60	62	66	60	50	79	..	..	..	50.8
	Minimum	10	8	29	2	2	25	35	28	34	30	27	35	32	29	32	28	23	18	48	25	12	23	16	30	43	29	20	37	..	..	..	25.2
Maysville §§	Maximum	22	38	40	12	43	43	43	52	47	50	63	62	53	74	40	49	32	57	62	34	28	41	55	62	68	46	54	76	..	..	..	48.1
	Minimum	7	5	8	0	-5	-2	35	29	33	29	30	35	37	30	32	26	23	17	21	30	10	13	21	24	49	23	21	25	..	..	..	21.6
Middlesboro	Maximum	42	35	47	45	32	44	60	64	64	61	62	66	66	69	68	[a]53	50	58	58	61	41	42	55	62	66	70	60	71	..	..	..	56.1
	Minimum	29	29	34	16	8	24	33	34	50	37	26	44	34	48	45	31	30	22	47	30	20	35	23	45	45	31	25	38	..	..	..	32.6
Mount Sterling §§	Maximum	18	36	38	11	41	41	49	63	62	47	62	63	63	73	37	52	31	57	63	29	29	38	55	60	71	44	55	75	..	..	..	48.7
	Minimum	8	8	16	1	0	2	37	32	32	30	34	36	34	34	35	28	23	19	20	26	11	11	22	28	43	28	25	29	..	..	..	23.3
Richmond §§	Maximum	26	32	37	30	29	40	48	63	53	49	60	62	57	62	40	50	32	55	61	30	35	38	54	62	70	50	53	72	..	..	..	48.2
	Minimum	14	17	26	3	3	27	37	37	45	32	40	40	37	41	35	30	24	20	50	25	14	24	29	49	52	27	29	44	..	..	..	30.4
Weeksbury	Maximum	35	35	40	45	33	48	58	66	62	65	71	66	64	75	70	60	62	64	66	33	35	59	69	74	69	70	65	79	..	..	..	58.5
	Minimum	25	24	12	17	6	26	41	32	48	29	29	41	43	37	43	31	29	21	29	20	27	23	36	51	29	30	29	35	..	..	..	30.1
Williamsburg §§	Maximum	35	48	40	19	38	50	61	67	64	46	68	67	65	73	53	56	38	53	65	39	35	38	51	68	75	48	62	78	..	..	..	53.6
	Minimum	26	25	29	12	8	8	8	38	48	38	29	30	38	34	43	32	32	22	22	39	20	20	22	22	45	31	28	28	..	..	..	27.8

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

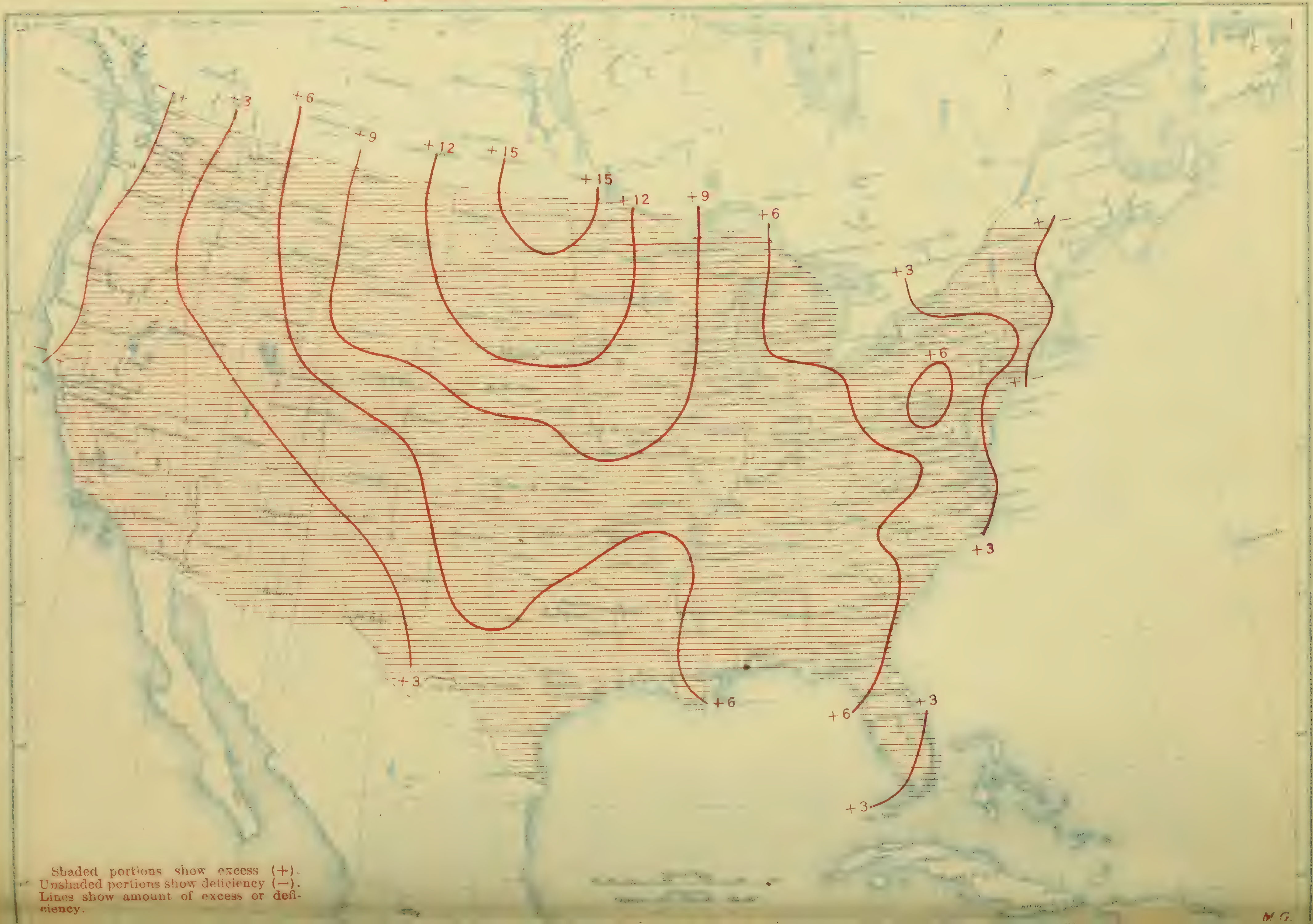
KENTUCKY SECTION

MARCH, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 27, 1918

Departure of the Mean Temperature from the Normal, March, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (–).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., March, 1918. No. 3.

GENERAL SUMMARY.

Weather conditions during March were exceptionally favorable for outdoor activities and the growth of vegetation. Temperatures were above normal during most of the month, and freezing temperatures were registered on only a few nights. The warmth was sufficient on nearly every day to promote the growth of grass and winter grains; and although wheat and rye entered the winter in unusually backward condition, by the end of March they had advanced so rapidly as to be abreast of the season. Pastures were in such excellent condition that considerable stock had been turned on them before the close of the month. Plowing and preparation of the soil proceeded almost without interruption, this work being unusually well advanced for the month. Gardening received great impetus on account of the favorable weather, and some early vegetables were up and growing nicely at the close of the month; also tobacco plants were generally up in the western and southern counties.

Rainfall averaged less than half the normal amount, but the timely rains of the 23d-25th met the immediate requirements for moisture in most sections. At the close of the month rain was needed over the western counties.

PRESSURE.

High pressure areas were dominant during most of the month, well-developed "highs" passing over or near this section on the 1st-3d, 10-11th, 15-16th, and 27-30th. During much of the last half of the month high pressure crests were present to the south or southeast of the State. Two strong "lows", attended by high winds and bringing good showers to central and eastern counties, passed over the section, one on the 9th and the other on the 13-14th (p. m.). Probably the most important pressure feature of the month was the shallow "low" that passed to the southward of the section on the 22d-24th, attended by beneficial rains generally over this State.

The mean sea-level pressure, determined from the records of two stations, was 30.08 inches. The extremes were 30.63 inches on the 10th and 29.55 inches on the 14th, both at Louisville.

TEMPERATURE.

The average temperature for the State, based on reports from 40 stations, was 51.6°, which is 5.6° above normal. There were no pronounced cold periods, and minimum temperatures were generally high for March. Rather hard freezes occurred on the 2d, 11th and 16th, but on account of the dryness of the soil no injury resulted. The monthly extremes were 85° at Bowling Green and Hopkinsville on the 13th, and 17 at Loretto on the 11th.

PRECIPITATION.

The average precipitation for the State, 54 stations reporting, was 1.97 inches, which is 2.69 inches below normal. The distribution over the State was very irregular, amounts at the various stations ranging between 4.23 inches at Catlettsburg and 0.23 inch at Leitchfield. There was a gradual and somewhat regular decrease from about 4 inches in the extreme eastern to less than 1 inch in the extreme western counties. Good showers occurred on the 4th and 23d-25th quite generally over the State, and over the central and eastern counties in the period 12-14th. Over most of the State there was no snow, a trace being reported from only a few of the extreme northern counties.

WIND.

The total wind movement at Louisville was 9,616 miles, and at Lexington 11,340 miles, with average hourly velocities of 12.9 and 15.2 miles respectively. The maximum velocity for five minutes at Louisville was at the rate of 68 miles from the southwest, and at Lexington 54 miles from the west, on the 9th at both stations. Velocities exceeding 40 miles per hour also occurred on the 10th, 12th, 13th, 14th and 22d.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 12 noon 54 per cent, and at 7 p. m. 54 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 62 and at Lexington 44.

MISCELLANEOUS.

March 7.—An aurora borealis was visible generally over the State from 8 to 11 p. m. The display was one of the most brilliant ever seen in this latitude.

March 9.—The collapse of a high brick wall, due to a gale of wind, killed 12 persons and injured 30 others at Winchester.

March 22.—Near Georgetown a young man was killed by lightning while standing under a tree.

Rivers.—Good stages prevailed in the Ohio during the first and last decades. A sharp rise began in the upper reaches on the 13th, resulting in flood stages at Catlettsburg on the 15th, Portsmouth on the 16th, and Maysville and Cincinnati on the 17th. This rise also caused flood stages at Cloverport and Evansville on the 20th. The crest stages were but little above flood stage at any point, and no damage of consequence was reported. Beginning with the 17th in the upper reaches this rise subsided quickly to good boating stage by the end of the month.

ERRATA.

December, 1917. Berea: minimum temperature on the 26th should be 23, mean minimum 16.7, and monthly mean 28.5; Blandville: minimum temperature on the 14th should be 6, mean minimum 19.1, and monthly mean 28.5; Marion: maximum temperature for the 26th should be 47, minimum 24.

January, 1918.—Farmers, total snowfall should be 15.4 inches.

COMPARATIVE DATA FOR MARCH.

Year	Temperature. Monthly average.	Temperature. Departure from 30-year normal.	Temperature. Highest.	Temperature. Lowest.	Precipitation. Monthly average.	Precipitation. Departure from 30-year normal.	Precipitation. No. of days with .01 or more.
1889	40.5	−5.5	84	18	1.52	−3.14	
1890	41.2	−4.8	78	4	8.34	+3.68	
1891	41.8	−4.2	71	9	8.08	+3.42	
1892	40.6	−5.4	82	7	4.08	−0.58	
1893	45.0	−1.0	89	5	2.76	−1.90	
1894	50.8	+4.8	86	10	2.72	−1.94	
1895	45.0	−1.0	88	15	3.17	−1.49	9
1896	41.1	−4.9	80	8	6.16	+1.50	12
1897	49.6	+3.6	86	20	7.94	+3.28	14
1898	50.7	+4.7	84	16	7.59	+2.93	13
1899	43.9	−2.1	80	−3	8.10	+3.44	15
1900	42.8	−3.2	81	−3	2.58	−2.08	9
1901	46.4	+0.4	87	3	3.50	−1.16	10
1902	47.2	+1.2	82	7	4.44	−0.22	11
1903	52.5	+6.5	85	19	4.43	−0.23	12
1904	47.7	+1.7	88	12	6.26	+1.62	12
1905	52.2	+6.2	86	22	4.45	−0.21	9
1906	39.2	−6.8	75	3	6.37	+1.71	16
1907	54.9	+8.9	92	18	2.28	−2.38	10
1908	51.8	+5.8	88	19	5.42	+0.76	13
1909	44.8	−1.2	74	17	5.14	+0.48	11
1910	55.0	+9.0	91	11	0.79	−3.87	3
1911	46.0	0.0	87	7	2.57	−2.09	9
1912	41.3	−4.7	88	10	6.22	+1.56	15
1913	46.5	+0.5	85	9	7.22	−2.56	10
1914	41.8	−4.2	78	2	3.62	−1.04	12
1915	37.8	−8.2	65	11	2.11	−2.55	8
1916	43.5	−2.5	84	4	3.39	−1.27	10
1917	45.9	−0.1	84	0	6.52	+1.86	14
1918	51.6	+5.6	85	17	1.97	−2.69	8

Climatological data for March, 1918.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	
Western Division.																				
Beaver Dam	Ohio	441	15	52.0	+ 5.3	82	13†	25	2†	44	1.55	−2.36	0.61	0	7	12	11	8	s.	Mrs. Della M. Davis.
Blandville	Ballard	445	36	54.2	+ 7.1	81	13†	25	10	36	1.44	−3.19	0.59	0	6	13	8	10	sw.	E. W. Horr.
Calhoun	McLean	437	14	54.0	+ 4.2	82	13†	24	10	48	1.80	−2.17	0.95	0	4	11	13	7	nw.	W. A. Taylor.
Earlington	Hopkins	420	27	53.3	+ 5.8	84	13	25	10†	47	1.58	−3.93	0.82	0	6	19	0	12	s.	Brick Southworth.
Greenville	Muhlenburg	519	1	[c]55.1	......	82[d]	13	25[b]	2†	45	1.60	......	0.50	0	7	11[b]	12[b]	6	s.	C. R. Lovell.
Henderson	Henderson		9								0.84	−3.94	0.44	0	4					W. W. Shelby.
Hopkinsville	Christian	524	21	57.1	+ 7.9	85	13	26	10	51	0.86	−3.98	2.50	0	4	10	10	11	e.	W. F. Randle.
Marion	Crittenden	571	19	54.4	+ 5.8	80	13†	24	2†	44	1.19	−3.60	0.63	0	2	19	3	9	......	B. C. Paris.
Mayfield	Graves	364	8	[c]53.2	......	81	22	21	10	46	0.80	......	0.50	0	2	10[c]	11[c]	7[c]	s.	J. N. Davis.
Owensboro	Daviess	479	21	51.8	+ 4.9	84	9	25	10†	41	2.11	−2.67	1.10	0	7	17	6	8	ne.	Henry S. Berry.
Paducah	McCracken	341	18	56.4	+ 6.6	82	13†	25	10	51	2.17	−2.26	1.50	0	4	19	1	11	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8																	Ray Baker.
Russellville	Logan	590	6	52.2	......	82	22	26	2	49	0.57	......	0.23	0	6	22	3	6	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	53.8	+ 3.1	77	5	28	16	38	1.09	−5.08	0.65	0	3	17	4	10	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	49.5	+ 4.4	79	22	23	2†	43	1.43	−2.55	0.42	0	5	18[b]	6[b]	5[b]	sw.	C. E. Barret.
Bardstown	Nelson	637	21	49.4	+ 2.8	81	22	22	11	51	1.59	−3.10	0.50	0	9	7	8	16	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	55.8	+ 7.5	85	13	24	11	46	0.75	−4.17	0.30	0	6	16	14	1	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0								2.09	......	0.62	0	7					James H. Young.
Burnside	Pulaski	773	25								3.62	−1.59	1.08	0	8					C. L. Hurt.
Carrollton	Carroll	492	18								1.72	−1.77	0.45	0	10					Charlie Oliver.
Cloverport	Breckenridge	375	4								1.11	......	0.37	0	9					W. A. Cockerill.
Edmonton	Metcalfe	600	24	[k]53.6	+ 5.4	80[k]	13†	24†	11	45[k]	2.20	−3.63	0.59	0	7	7[k]	7[k]	6[k]	n.	P. W. Ray.
Eubank	Pulaski	1177	23	49.4	+ 3.1	78	22	24	11	50	2.68	−2.57	1.03	0	10	7	11	13	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	51.5	+ 5.3	79	9	24	11	49	1.58	−3.12	0.48	0	9	15	3	13	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22																	
Greensburg	Green	581	25	50.4	+ 3.6	80	9†	23	11	47	1.91	−3.12	0.56	0	8	5	9	17	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15								2.05	−2.16	0.45	0	11					Miss Lulu Wood.
Irvington	Breckenridge	646	20	52.4	+ 5.6	79	13	24	10	44	1.67	−2.93	1.04	0	4	17	3	11	sw.	W. J. Piggott.
Junction City	Boyle	985	24	51.8	+ 5.7	80	22	20	11	46	2.33	−2.78	0.50	0	14	12	9	10	w.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	51.4	+ 5.4	82	13†	24	10†	46	0.23	−4.56	0.18	0	3	16	9	6	ne.	John E. Stone.
Lexington	Fayette	989	30	49.2	+ 5.8	77	9	23	10	36	1.55	−3.17	0.51	0	9	11	8	12	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	52.3	+ 5.1	82	9	17	11	51	1.90	−2.31	0.40	0	10	14	12	5	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	50.8	+ 5.5	79	13	24	10	45	1.22	−3.10	0.55	0	8	13	7	11	n.	U. S. Weather Bureau.
Do (Cherokee Park).	Do.	534	8	50.2	......	80	13	22	2†	49	1.56	......	0.37	0	6	17	6	8	s.	Wm. I. Hunt.
St. John	Hardin	777	21	49.8	+ 4.7	80	13†	24	10†	48	1.58	−3.41	0.40	0	9	21	3	7	......	Sisters of Loretto.
Scott¶	Kenton	900	20	49.4	+ 6.0	77	9†	19	16	45	2.52	−1.92	0.68	T.	9	15	5	11	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	48.2	+ 3.5	79	22	22	8	44	1.54	−3.17	0.48	0	11	14	8	9	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	50.0	+ 4.2	78	13	22	11	42	1.49	−2.85	0.58	0	9	13	8	10	s.	E. D. Bourne.
Williamstown	Grant	943	15	49.2	+ 6.0	80	22	22	11	42	1.70	−2.46	0.66	0	0	14	9	8	......	Miss Rose Carter.
Woodbury	Butler	533	0								1.75	......	0.50	0	7					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	49.0	+ 4.3	81	13†	20	11	55	2.54	−2.79	0.80	0	9	20	4	7	sw.	A. H. Bowman.
Berea	Madison	1070	16	51.8	+ 4.5	79	22	24	11†	45	3.21	−1.72	1.20	0	4	7	1	13	sw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	29								4.23	+0.67	1.20	0	12					Forester Farley.
Cynthiana	Harrison	684	0								2.79	......	1.10	T.	12					P. H. Kehoe.
Falmouth	Pendleton	600	29								2.25	−1.84	0.66	T.	15	13	4	14	......	J. V. Oldham.
Farmers	Rowan	668	10	49.4	+ 4.5	80	22	19	11	49	3.18	−1.38	1.35	0	11	20	2	9	w.	Durwood Cassity.
Jackson	Breathitt	776	6								1.77	−2.86	0.40	0	8					Jas. L. McCoy.
London	Laurel	1190	3								3.12	......	0.70	0	9					C. R. Lee.
Louisa	Lawrence	584	14								3.95	−0.17	0494	0	12					Miss Carrie S. Adams.
Manchester	Clay	1400	8								1.81	−2.69	0.51	0	3					Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	46.8	+ 2.7	80	21†	20	11	45	2.51	−2.13	0.90	T.	9	19	5	7	w.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	54.3	+ 5.8	77	4†	21	11	37	2.53	−2.95	0.80	0	10	20	9	2	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	48.4	+ 4.7	77	22	23	11	41	2.75	−2.66	0.90	0	13	19	2	10	sw.	W. R. McKee.
Pikeville	Pike	634	12								4.05	−0.16	0.90	0	7					I. M. Williams.
Richmond	Madison	926	24	49.3	+ 4.0	76	22	24	11	36	1.38	−3.01	0.25	0	11	16	11	4	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	53.0	......	78	23	25	10	45				0		20	3	8	......	O. A. Lund.
Williamsburg	Whitley	939	20	52.2	+ 6.1	79	5†	26	16†	44	2.88	−2.04	0.57	0	11	15	8	8	w.	N. C. Jones.
State averages and extremes				51.6	......	85	13	17	11	55	1.97	......	1.50	T.	8	15	7	9	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky

Daily Precipitation for March, 1918.

Day of month.

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
eaver Dam	G	T	.05		.50	.10							.15											.04	.61	.10							[illegible]
landville	M	.23		.09	.49		T															T			.59			.02	.02				[illegible]
alhoun	G	.08		T	.47		T			T			T	T							T			.30	.95								[illegible]
arlington	G	.17			.30								T		.10									.15	.82	.04			T				[illegible]
reenville	G	.15			.31			.02			.10		.02											.50	.50								1.60
enderson‖	O	T.	T		.44								.05											.10			.25						0.84
opkinsville	C	.25			.50																				.10			.01					0.86
arion	O			T.	.56									T										T.	.63								1.19
ayfield‖	M				.30																				.50								0.80
wensboro‖	O	.05			.45	.06			T.				.07		T.									.13	1.10	.25			T				2.11
aducah	O	.21			.43					T				T										.03	1.50								2.17
rinceton	G																																
ussellville‖	G		.04		.17																	.09		.01	.23	.03							[illegible]
Central Division.																																	
lpha	C	T.			T.		T.			.34			T		.10						.65	T		T.									1.09
nchorage	O				.33									.42									.03	.11	.24	T							1.43
ardstown‖	S				.20	.41		.03			.09		.19	.10											.50	.04		.03					1.59
owling Green	G		.10		.05								T.								.10			.10	.30	.10							0.75
rownsville‖	G		.34		.37	.54								.03								.07			.62	.12							2.09
urnside	C		.04			1.08		.52			.58		T.	T.		T.					.38	.28		T.	.34	.40							3.62
arrollton‖	O	.01				.28		.01			T		.01	.15	.25	.12							.02		.45	.42							1.72
loverport‖	O	.02	.02		.29	.24					T		.01									T.		.01	.14	.37			.01				1.11
dmonton	G				.40		.05			.22				.40	T.						.30			.24		.59							2.20
ubank	C		.21		.05	1.03		.04			.28			.24		.18						.10		.50	.05								2.68
rankfort‖	K	T.	T		.22	.17		T.			T		.08	.12	.23	.20						T.		.02	.48	.06			T				1.58
ranklin	G																																
reensburg‖	G	.45			.10	.56								.05							.16			.08	.44	.07			T				1.91
igh Bridge‖	K	T.	.07		.12	.45		.20			.02		.12	.10								.03		.45	.44	.05							2.05
vington	O				.31		T.			T.			.15	T.	T									.17	1.04		T						1.67
unction City	K	.07			.50		.09	.05	.02	.05			.28		.23		.02				.20	.05		.27	.45	.05							2.33
eitchfield	G	.03			.18									T.	T						T			T	.02					T			0.23
exington ***	K	.07		T.	.43	.02	T			.03			.25	T.	.01						T.		.19	.32	.23		T.	T					1.55
oretto	S	.10			.30	.15	.10	.10					.25		.20							T		.20	.40	.10	T.						1.90
OUISVILLE***	O	T.			.23		T.			.10			.12	.12	.01						T		.07	.21	.36		T.						1.22
Do. (Cherokee Park)	O	T.			.25		T			.20			.07	.35	T								T.	.32	.37			T.					1.56
. John‖	S	.02			.30	.30		T.			.15		.18	.02								.02		T	.40	.19							1.58
ott	L	.04			.34		.13			.19			.05	.68								T.	.12	.37	.60		T	T					2.52
elbyville‖	S	.01	.07		.17	.10					.04		.08	.28	.11	.08									.48	.12							1.54
aylorsville	S	.06			.34		T	T.		.02			.16	.07	.16						T	T	T	.09	.58	.01	T	T					1.49
illiamstown‖	L		T.		.01	.18		.01			.03		.01	.28	.66	T						T		T	.33	.19							1.70
oodbury‖	G		.19		.38	.21															.08			.13	.50	.26							1.75
Eastern Division.																																	
eattyville‖	K					.80		.24			.10		.10	.35		.15						.11			.35	.34							2.54
erea	K				.90		.70			.41					T.						T.	T.	T.	T	1.20			T					3.21
atlettsburg‖	B		.10		.15	.43		.08		.04	.04		.02	1.20	1.02	.60								.10		.45							4.23
ynthiana‖	L	T.	.04		.05	T.	.13	T.			.03	.04		.65	1.10	.25						T.		.03	.32	.10		.05					2.79
almouth‖	L	.02			.11	.25		.05		.03	.02		.02	.40	.66	.02						.01		.04	.32	.25		.05					2.25
armers	L	.10			.38	.20					.27		.25	1.05	.10							.05		.29	.37	.12							3.18
ckson‖	K		.07		T.	.40		.05		T.	T.		T	.30		T.						.20	T.	.05	.40	.30		T.					1.77
ondon‖	C		.10			.70	.45						.05	.35							.02	.45			.50	.50							3.12
uisa‖	B		.12			.52		.19			.03		T.	.94	.71	.15						.16		.10	.39	.50	T.	.14					3.95
anchester‖	K					.81																			.09	.91							1.81
aysville‖	O	T.	T.		T.	.23		T.		T.	.07		T	.56	.90	T								.07	.15	.47	.04	.02					2.51
iddlesboro	C	.03		.16				.16			.80		.06		.12						.34	.12		.30	.44								2.53
ount Sterling	L		.05			.90		.05			.45		.23	.13	.07	.09						.10		.07	.50	.06		.05					2.75
keville‖	B					.90		.50						.90								.50		.55	.40	.30							4.05
chmond‖	K				.03	.09		.15			.05		.25	.15	.05	.15								.20	.21	.05							1.38
eeksbury	B																																
illiamsburg‖	C		.05			.28		.47			.37		T.	.03		.20					.04	.57	.03		.30	.54							2.88

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

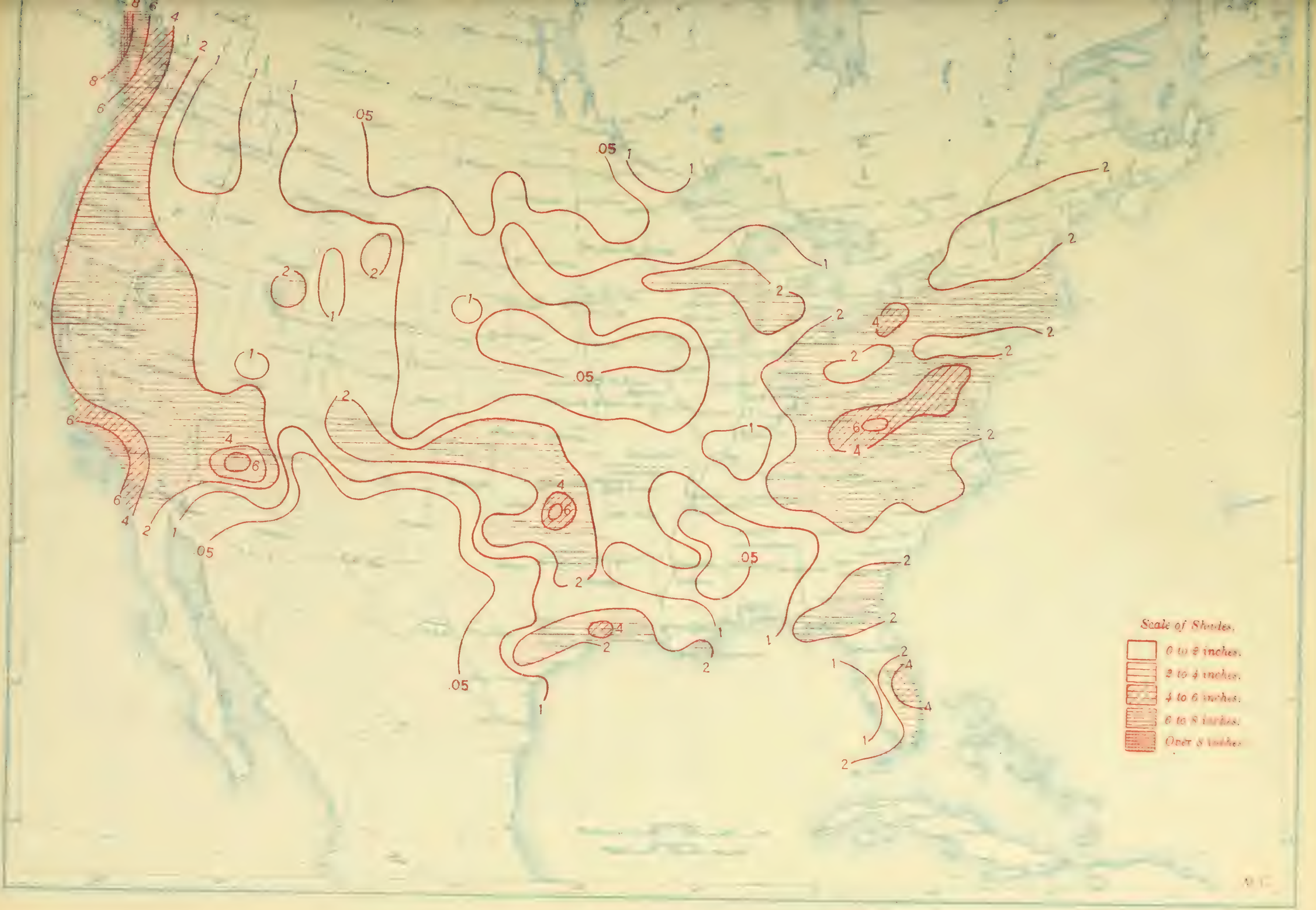
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for March, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	48	61	60	68	79	60	52	64	59	45	66	68	82	76	55	56	61	74	78	70	78	82	82	80	62	71	60	63	66	72	73	66.8
	Minimum	40	25	26	40	40	51	34	27	30	25	25	29	50	55	31	26	27	30	37	44	43	43	47	36	36	35	42	40	42	39	55	37.1
Blandville	Maximum	48	62	57	67	77	67	51	65	75	58	65	68	81	74	53	53	64	71	73	67	74	81	73	49	65	72	64	66	67	71	70	66.1
	Minimum	36	30	42	46	51	38	33	34	50	25	29	55	64	42	31	29	33	41	49	51	47	59	48	41	38	46	51	43	38	43	50	42.4
Calhoun	Maximum	75	63	59	67	78	72	53	62	77	72	67	66	82	76	53	52	66	74	79	72	79	82	74	59	62	72	60	63	67	74	71	68.6
	Minimum	37	27	35	43	42	44	33	29	53	24	26	52	63	46	29	26	26	38	45	50	46	50	45	41	32	40	41	39	33	39	49	39.5
Earlington §§	Maximum	47	62	57	69	81	56	53	69	79	46	70	69	84	77	50	57	65	78	80	72	80	82	71	48	65	73	61	67	70	75	75	67.4
	Minimum	39	26	30	43	42	56	36	28	37	25	25	36	58	65	31	27	26	31	45	48	46	51	49	45	31	40	46	42	33	36	42	39.2
Greenville	Maximum	72	61	56	67	79	73	53	63	78	70	68	69	82	78	..	..	..	..	77	69	78	80	75	65	63	73	66	62	67	72	71	[d]69.9
	Minimum	38	25	32	45	43	46	34	28	55	25	25	52	65	47	30	..	..	26	43	48	45	50	49	42	35	39	44	41	35	36	47	[b]40.3
Hopkinsville	Maximum	77	64	60	71	79	72	56	63	78	77	70	70	85	78	56	56	63	73	77	68	78	83	75	64	67	64	65	69	71	75	74	70.3
	Minimum	39	29	35	48	45	51	37	31	55	26	29	53	65	56	32	29	29	31	60	54	44	53	53	43	49	51	53	49	42	43	47	43.9
Marion	Maximum	72	64	53	66	78	73	63	62	77	68	66	68	80	73	52	50	63	72	76	70	76	78	78	66	65	71	63	64	65	71	71	68.2
	Minimum	46	24	33	47	42	42	33	28	55	24	26	58	58	40	30	25	26	40	44	47	46	55	58	40	32	34	44	40	36	60	48	40.7
Mayfield §§	Maximum	52	63	57	69	..	..	..	75	76	44	66	72	80	73	55	54	63	71	74	65	74	81	74	47	66	71	66	66	77	73	70	[c]66.9
	Minimum	38	29	36	41	50	..	..	..	30	21	27	27	57	68	31	30	28	39	47	47	45	36	51	42	33	40	47	45	39	39	45	[c]39.6
Owensboro §§	Maximum	47	60	57	64	80	54	51	65	84	44	66	67	78	70	53	50	62	73	73	76	72	76	63	46	60	62	55	62	66	70	71	63.8
	Minimum	37	29	47	37	42	53	33	31	45	25	25	42	55	67	32	31	28	32	43	44	46	52	45	43	34	40	40	40	36	40	43	39.9
Paducah (Lone Oak)	Maximum	77	62	56	67	78	78	70	68	81	76	68	68	82	73	56	58	65	70	74	70	79	82	77	62	63	73	69	64	68	72	72	70.3
	Minimum	37	32	41	47	48	41	34	35	58	25	29	56	65	46	31	30	29	40	50	51	45	57	49	42	35	47	48	44	39	42	49	42.6
Princeton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	45	63	60	69	79	67	54	63	79	46	66	69	82	75	48	56	61	73	75	62	76	82	72	47	61	73	61	66	69	74	72	66.0
	Minimum	41	26	30	44	48	52	36	28	30	27	28	29	54	67	31	28	28	29	29	45	48	51	51	46	34	38	39	38	33	39	44	38.4
Central Division.																																	
Alpha	Maximum	66	65	61	69	77	68	64	61	76	63	64	58	74	69	68	60	60	68	73	66	70	76	68	55	58	63	63	61	65	70	70	66.1
	Minimum	44	36	38	48	48	44	37	30	43	30	30	44	55	58	37	28	30	30	45	53	53	51	45	46	36	39	44	40	38	43	45	41.5
Anchorage	Maximum	65	55	54	65	77	65	47	59	77	66	66	59	78	72	52	51	58	73	76	70	76	79	59	48	60	54	53	57	63	69	72	63.7
	Minimum	32	23	30	40	36	40	32	24	49	24	23	47	51	48	37	23	25	31	39	39	44	45	39	40	28	30	34	31	32	37	41	35.3
Bardstown §§	Maximum	44	65	61	63	78	71	53	66	79	45	62	66	75	52	56	60	63	76	80	72	78	81	59	49	65	58	57	62	66	72	74	64.8
	Minimum	40	24	24	41	40	47	32	25	28	25	22	24	47	31	25	26	29	30	35	42	46	46	44	43	32	33	36	32	32	34	39	34.0
Bowling Green §§	Maximum	58	66	64	70	82	67	66	68	81	64	69	74	85	76	76	56	68	77	78	65	78	84	70	48	65	74	61	68	72	76	75	70.4
	Minimum	41	30	35	43	45	56	36	29	40	27	24	46	54	67	40	28	30	31	45	54	49	51	50	47	35	39	42	41	34	40	44	41.1
Edmonton	Maximum	..	..	..	78	75	76	76	63	79	69	67	..	80	76	..	53	62	73	..	75	..	..	80	55	..	66	64	63	..	..	72	[k]70.1
	Minimum	..	..	..	43	44	42	31	26	50	27	24	..	50	52	..	27	28	28	..	42	..	..	37	45	..	34	31	37	..	..	36	[k]37.2
Eubank §§	Maximum	51	62	60	56	75	69	47	61	77	53	66	65	77	69	48	52	59	70	75	59	72	78	54	55	59	61	57	59	65	69	73	63.0
	Minimum	51	27	28	37	45	47	33	25	27	27	27	26	49	65	34	26	29	26	27	41	51	45	45	43	32	30	31	36	33	34	37	35.9
Frankfort	Maximum	72	55	55	60	75	73	54	57	79	75	64	63	77	76	57	52	58	70	73	72	75	77	59	52	58	57	52	57	64	68	71	64.7
	Minimum	40	26	31	44	42	54	31	27	48	26	24	47	58	56	34	28	28	31	37	40	55	47	43	43	32	38	35	34	34	34	40	38.3
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	47	60	60	65	73	69	49	59	80	42	67	68	80	74	51	53	61	71	74	62	74	80	58	55	60	62	60	61	65	71	73	64.0
	Minimum	46	25	29	37	38	41	34	25	33	27	23	31	52	62	34	25	27	27	39	43	53	45	45	48	30	34	40	36	32	35	41	36.7
Irvington	Maximum	73	57	55	66	76	66	48	60	76	68	63	62	79	76	49	51	59	69	74	71	76	78	73	52	60	60	52	58	62	80	71	64.8
	Minimum	33	27	36	46	42	42	34	29	51	24	29	47	62	47	32	28	29	42	46	47	53	53	42	42	34	40	37	37	35	42	49	39.9
Junction City	Maximum	77	60	58	57	77	73	59	60	79	69	66	66	78	74	60	51	60	74	76	65	75	80	76	53	60	55	53	62	64	70	75	66.5
	Minimum	40	25	34	34	37	59	31	25	54	26	20	48	57	60	34	23	27	28	30	43	52	45	45	37	32	38	35	30	29	32	40	37.1
Leitchfield	Maximum	60	50	55	66	76	60	50	62	79	70	64	63	82	74	50	55	59	72	75	68	77	82	65	54	59	66	58	60	64	71	71	65.1
	Minimum	35	27	33	43	42	43	34	26	40	24	24	47	60	45	30	27	27	35	42	49	47	48	45	40	34	37	38	37	34	38	42	37.8
Lexington	Maximum	60	53	54	58	74	63	41	59	77	41	62	58	75	73	44	49	55	68	74	68	73	74	47	47	55	48	50	53	62	67	70	59.7
	Minimum	36	32	34	45	49	35	29	34	41	23	27	46	59	39	30	25	38	42	51	52	53	46	40	38	33	36	31	30	32	44	47	38.6
Loretto	Maximum	75	60	60	65	78	76	67	60	82	75	66	65	80	78	60	53	60	71	76	71	76	80	75	55	61	60	62	60	65	70	71	68.2
	Minimum	30	23	27	43	38	55	30	24	48	24	17	45	58	55	30	23	26	29	38	40	53	46	44	44	31	34	35	33	30	33	43	36.4
Louisville	Maximum	52	57	54	65	76	65	48	59	77	40	63	64	79	73	50	49	58	72	75	70	78	78	50	49	60	54	53	58	64	70	71	62.3
	Minimum	35	30	36	42	43	36	31	33	32	24	28	48	62	35	33	30	36	46	49	50	56	48	42	42	36	40	36	34	35	42	51	39.4
Do. (Cherokee Park)	Maximum	77	55	55	65	77	72	48	59	77	71	64	60	80	77	52	50	60	73	74	71	75	78	61	50	60	56	53	57	63	72	74	65.0
	Minimum	35	22	29	38	38	41	28	25	47	22	24	45	57	49	28	23	25	34	40	41	52	42	38	38	31	42	33	28	29	35	42	35.5
St. John §§	Maximum	43	61	55	64	76	68	50	61	77	42	63	65	80	74	50	52	60	73	75	67	78	80	57	48	65	61	54	59	63	71	71	63.4
	Minimum	41	26	32	39	39	45	32	26	29	24	24	31	48	60	30	26	26	30	35	45	49	47	44	44	33	35	37	35	31	35	43	36.2
Scott	Maximum	69	58	55	59	75	69	45	60	77	70	62	59	74	72	48	56	60	73	75	77	77	75	48	57	59	55	50	53	62	70	71	63.4
	Minimum	34	25	31	37	31	42	26	29	46	25	22	46	54	48	30	19	30	39	43	40	40	48	36	37	31	35	34	30	28	33	44	35.3
Shelbyville §§	Maximum	42	56	54	62	76	66	47	61	77	42	64	63	77	71	50	52	59	73	76	69	77	79	50	46	60	53	53	58	64	70	72	61.9
	Minimum	38	24	28	37	40	46	30	22	33	24	23	30	45	62	30	24	26	32	39	42	43	45	41	40	29	33	33	29	29	31	38	34.1
Taylorsville	Maximum	70	57	54	64	75	67	45	58	77	71	63	59	78	73	49	50	58	70	73	70	76	78	58	50	59	54	53	56	63	69	71	63.5
	Minimum	39	24	28	45	39	44	31	24	46	25	22	45	58	49	32	24	25	28	36	38	52	43	42	41	30	34	36	33	33	32	57	36.6
Williamstown §§	Maximum	59	60	56	59	76	66	49	60	78	56	64	60	74	71	58	57	60	78	79	79	79	80	48	41	59	40	52	56	63	73	72	63.3
	Minimum	37	37	32	36	40	43	27	27	36	24	22	23	46	60	30	23	24	38	41	46	49	51	38	38	31	31	33	29	28	31	40	35.2
Eastern Division.																																	
Beattyville §§	Maximum	57	61	61	55	80	74	50	66	78	45	75	65	81	73	53	55	62	76	80	72	70	81	51	55	60	55	55	63	57	73	77	65.0
	Minimum	33	27	26	29	41	41	37	25	26	30	20	24	45	64	36	23	26	25	26	33	43	43	41	40	32	30	35	32	29	31	30	33.0
Berea	Maximum	70	59	57	68	76	70	55	63	71	66	66	70	76	73	70	53	65	72	75	75	73	79	72	59	58	53	53	58	64	70	73	66.5
	Minimum	39	25	33	36	36	55	31	26	44	26	24	39	48	52	48	24	30	32	39	30	55	52	38	45	30	35	35	34	31	35	48	37.2
Farmers	Maximum	55	58	58	58	78	59	67	60	76	66	68	66	76	75	55	59	63	74	78	69	77	80	55	59	58	59	54	63	67	73	78	65.8
	Minimum	37	23	23	38	36	37	30	20	34	26	19	46	51	60	34	21	25	25	29	35	51	39	40	40	28	30	30	25	27	27	33	32.9
Maysville §§	Maximum	46	60	58	55	76	63	45	61	68	42	65	60	78	73	47	55	60	72	77	78	80	80	54	45	59	43	56	59	66	71	75	62.2
	Minimum	38	23	23	30	35	40	29	23	25	23	20	23	49	53	33	22	25	30	32	35	35	43	40	40	28	31	28	28	28	31	33	31.5
Middlesboro	Maximum	73	67	65	77	72	77	73	60	70	68	62	57	74	72	65	64	62	60	76	75	68	77	69	56	58	60	58	66	67	69	71	67.4
	Minimum	50	35	29	59	45	49	40	26	42	31	24	41	54	64	36	25	34	26	42	52	52	45	49	50	40	42	38	39	40	45	34	41.2
Mount Sterling §§	Maximum	44	55	51	55	75	70	42	58	76	38	64	62	74	72	46	52	61	70	75	73	73	77	50	55	66	48	51	56	69	69	73	61.4
	Minimum	43	26	32	42	40	42	30	27	35	26	23	28	47	47	34	24	28	32	40	45	49	49	41	41	30	35	30	29	30	32	42	35.5
Richmond §§	Maximum	41	55	54	59	72	63	45	55	75	39	60	54	75	69	49	52	58	70	75	55	74	76	50	54	57	53	50	60	65	68	70	59.8
	Minimum	43	29	30	43	47	58	32	28	42	26	24	32	50	60	35	25	30	35	42	49	53	51	43	45	31	39	35	30	31	38	46	38.8
Weeksbury	Maximum	71	66	64	68	76	75	76	64	74	60	59	60	70	70	63	60	63	76	75	70	65	65	78	60	60	65	58	68	72	69	75	67.6
	Minimum	43	31	31	45	45	57	38	28	31	25	27	40	48	40	35	27	33	31	38	40	54	53	47	48	40	37	38	31	35	31	46	38.5
Williamsburg §§	Maximum	63	75	67	66	79	78	48	67	67	45	66	67	79	71	51	56	62	72	72	56	71	79	63	58	51	65	69	64	68	70	73	65.7
	Minimum	49	35	30	46	45	47	39	28	29	30	28	30	54	67	36	26	26	28	36	38	52	41	49	43	38	35	42	38	30	36	46	38.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.
.05
1
2
4
6
8

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

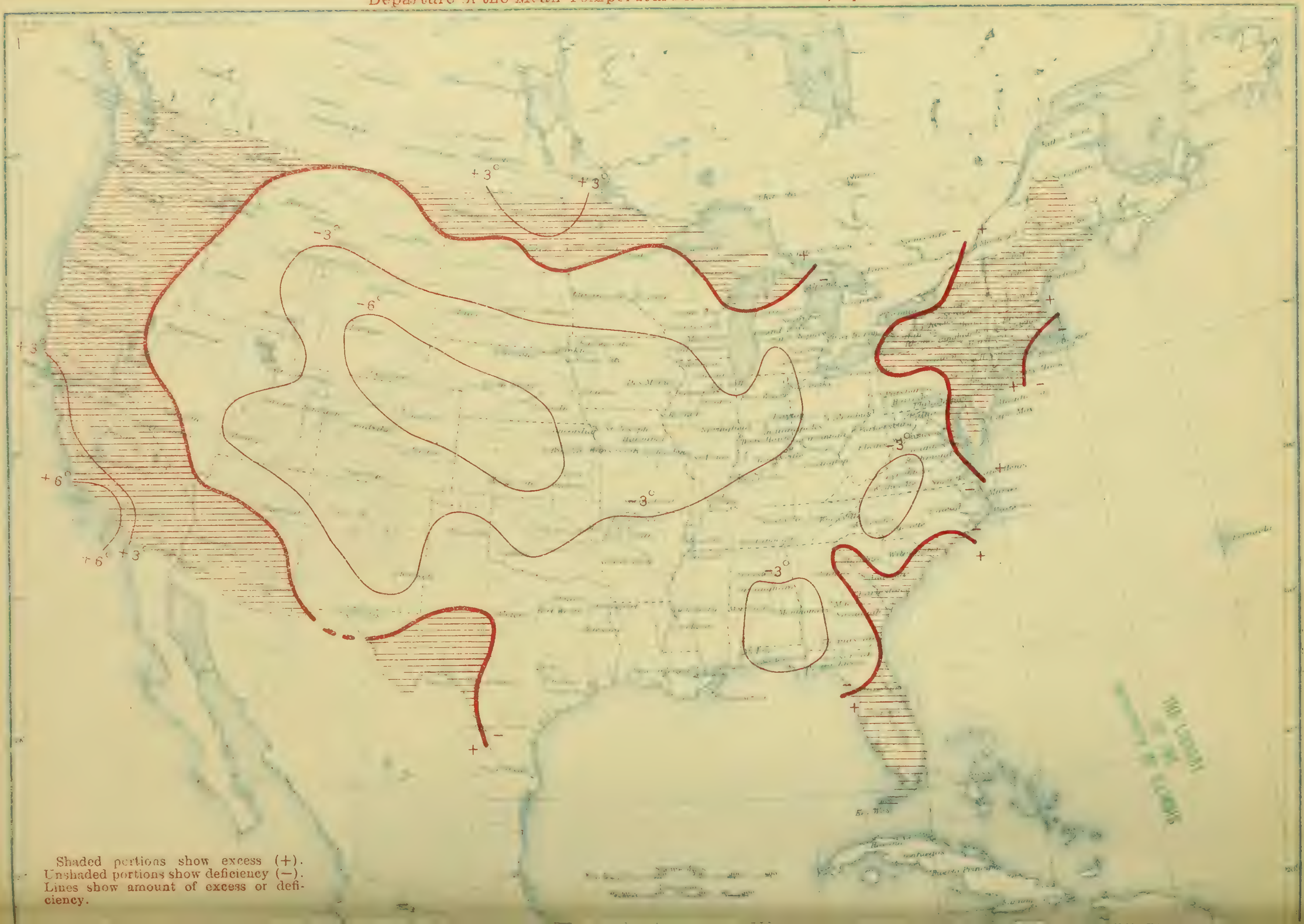
KENTUCKY SECTION

APRIL, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 20, 1918

Departure of the Mean Temperature from the Normal, April, 1918



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

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KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

ol. XXIII. LOUISVILLE, KY., APRIL, 1918. No. 4

GENERAL SUMMARY.

Unseasonably low temperature, high winds, showers almost aily during the last half of the month, and an unusual amount f cloudiness, even for April, were the principal features of the nonth's weather. At many stations the maximum temperature or the month did not reach 80°. During the period 5-14th ninimum temperatures registered below freezing in some sections f the State on every day except two. Snow occurred generally n the 10th, accompanied by temperatures of 25° to 30°, damging foliage to some extent. Killing frosts were general over ne State, except in the extreme western counties, on the 13th, nd over the eastern half of the State on the 14th. They caused ome damage to early beans and potatoes, but most vegetables rowing at this time were sufficiently hardy to withstand this mperature. During the period 19-26th, minimum temperaures were again low, with light frost on the 21st. The cool, oudy weather retarded germination and checked the growth of eveloping vegetation, especially tobacco plants, which were nsiderably delayed by these conditions. The winter grains ade sufficiently rapid progress, any tendency to premature eading being held in check by the low temperature. Wet soil uring the last two weeks hindered farm operations to some tent, particularly corn planting in the southern and western unties. However, in spite of the unfavorable temperature nditions during April, the staple crops had generally reached asonal development at the end of the month, except tobacco ants which were a week or ten days late.

PRESSURE.

Weather conditions over the section during the month were nder the influence of low pressure areas in the periods: 1st-3d; 7th, 15-17th, 19th-21st, 24-26th, and 27-29th. All of the lows" were attended by rain, one or two by thunderstorms, nd several by high winds, but none were of unusual strength violence. High pressure areas, attended by unseasonably w temperature, dominated during the 4-5th, 8-14th, and 30th.

The mean sea-level pressure, determined from the records of o stations, was 30.00 inches. The extremes were 30.50 inches the 9th and 29.53 inches on the 17th, both at Louisville.

TEMPERATURE.

The average temperature for the State, based on reports from stations, was 53.9°, which is 2.0° below normal. A few ys at the beginning, near the middle, and at the end of the onth were moderately warm, with mean temperatures above rmal; otherwise temperatures were almost continuously below rmal. The monthly extremes were 87° at Greenville on the , and 25° at Cherokee Park on the 10th.

PRECIPITATION.

The average precipitation for the State, 55 stations reporting, s 4.7 inches, or 0.13 inch above normal. In general the rainll was heaviest in the southern counties, ranging in most alities between 4 and 6 inches. Over the northern counties amounts ranged between 2 and 4 inches, being lightest over the western portion of the bluegrass region and counties westward to the Ohio River. Amounts at the various stations ranged between 7.75 inches at Alpha and 2.09 inches at Lexington. Rainfall was frequent, but daily amounts were generally light. The principal periods were: 2-3d; 7-8th in eastern counties; 16-17th; 19th-21st; and 24-29th.

WIND.

The total wind movement at Louisville was 11,023 miles, and at Lexington 11,422 miles, with average hourly velocities of 15.3 and 15.9 miles respectively. This is the highest wind movement on record for Louisville for April. The maximum velocity for five minutes at Louisville was at the rate of 49 miles and at Lexington 48 miles per hour from the southwest, on the 17th at both stations. Velocities of 40 miles per hour or over occurred on the 1st, 2d, 3d, 6th, 8th, 9th, 17th, 20th, 28th, and 29th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 77 per cent, at 12 noon 58 per cent, and at 7 p. m. 58 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 43 and at Lexington 33.

MISCELLANEOUS.

April 3.—Four persons were killed and damage estimated at $100,000 resulted from a severe local storm in Hickman County. A residence at Lexington was destroyed by lightning. A wind, rain and hailstorm caused considerable damage in Hancock County, roofs in some instance being wrecked by the hail.

April 13.—A barn near Eddyville was burned by lightning.

Rivers.—Good stages prevailed during the month in the Ohio River and its tributary streams in this State.

ERRATA.

February, 1918. Earlington: date of lowest temperature should be 5th. Frankfort: mean maximum temperature should be 39.6. Mayfield: days with .01 or more precipitation should be 4.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more.
1889	57.0	+1.1	89	24	1.61	−2.33	
1890	57.0	+1.1	92	28	4.04	+0.10	
1891	58.0	+2.1	92	24	2.52	−1.42	
1892	56.0	+0.1	88	22	7.12	+3.18	
1893	58.0	+2.1	94	21	6.99	+3.05	
1894	56.0	+0.1	94	23	3.54	−0.40	
1895	57.2	+1.3	94	22	3.18	−0.76	[illegible]
1896	63.6	+7.7	96	24	1.65	−2.29	[illegible]
1897	55.5	−0.4	90	25	6.03	+2.09	[illegible]
1898	52.4	−3.5	86	19	3.38	−0.56	[illegible]
1899	57.2	+1.3	96	20	3.16	−0.78	[illegible]
1900	56.2	+0.3	90	15	2.15	−1.79	[illegible]
1901	50.9	−5.0	91	23	4.01	+0.07	10
1902	51.2	−4.7	93	22	2.65	−1.29	[illegible]
1903	55.4	−0.5	90	22	4.43	+0.49	12
1904	50.8	−5.1	85	16	2.83	−1.11	11
1905	56.7	+0.8	91	23	3.00	−0.94	9
1906	59.5	+3.6	94	23	1.40	−2.54	[illegible]
1907	48.2	−7.7	87	19	2.78	−1.16	[illegible]
1908	59.8	+3.9	89	23	6.56	+2.62	14
1909	56.1	+0.2	96	21	5.98	+2.04	[illegible]
1910	55.4	−0.5	88	23	5.14	+1.20	14
1911	53.8	−2.1	90	20	7.06	+3.12	14
1912	58.4	+2.5	87	25	7.90	+3.96	12
1913	55.3	−0.6	89	27	2.73	−1.21	[illegible]
1914	55.7	−0.2	91	15	3.62	−0.32	10
1915	60.1	+4.2	96	17	0.96	−2.98	5
1916	54.0	−1.9	89	23	2.64	−1.30	[illegible]
1917	55.8	−0.1	90	19	5.62	+1.68	[illegible]
1918	53.9	−2.0	87	25	4.07	+0.13	[illegible]

Climatological data for April, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	15	53.0	-2.4	80	2†	29	10†	36	3.75	-0.36	0.86	T.	14	8	8	14	e.	Mrs. Della M. Davis.
Blandville	Ballard	445	36	55.0	-2.2	81	2†	28	9	30	6.99	+2.46	1.86	T.	14	4	13	13	ne.	E. W. Horr.
Calhoun	McLean	437	14	55.0	-3.9	79	2†	27	10	34	3.80	-0.68	1.01	T.	12	4	15	11	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	54.2	-3.0	85	16	30	10†	42	4.50	+0.18	1.04	T.	11	14	0	16	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	57.4	......	87	3	29	10†	40	4.09	......	1.20	T.	9	9	18	3	n.	C. R. Lovell.
Henderson	Henderson	....	9	....	....	....	....	....	....	....	4.64	+1.21	1.30	T.	12	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	21	55.2	-1.6	85	2†	30	10	37	4.78	+0.43	1.10	T.	10	8	10	12	s.	W. E. Graves.
Marion	Crittenden	571	19	54.6	-2.7	82	2	27	13	35	5.22	+0.64	2.00	T.	7	5	12	13	nw.	B. C. Paris.
Mayfield	Graves	364	8	54.4	-2.8	81	2	30	10	34	6.54	+2.40	2.35	T.	12	3	14	13	n.	J. N. Davis.
Owensboro	Daviess	479	21	52.3	-2.9	81	16	29	10	36	3.91	-0.19	1.28	T.	11	8	7	15	nw.	Henry S. Berry.
Paducah	McCracken	341	18	57.0	-2.2	85	16	28	10	33	5.74	+1.37	1.07	T.	15	16	1	13	n.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{a}54.5	-3.7	84	2†	29	10	37	6.69	+3.12	1.82	T.	8	....	....	....	e.	Ray Baker.
Russellville	Logan	590	6	53.7	.....	79	2†	29	10	39	4.29	-0.84	1.11	T.	13	12	6	12	s.	E. C. Shelton.
Central Division																				
Alpha	Clinton	811	24	56.2	-1.1	78	25	29	10	31	7.75	+2.48	2.57	0.2	12	7	5	18	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	53.0	-0.4	78	2†	26	10	36	2.85	-1.13	0.75	1.1	10	12	9	9	ne.	C. E. Barret.
Bardstown	Nelson	637	21	52.9	2.4	81	2†	27	10†	41	2.88	-0.99	0.70	T.	13	3	5	22	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	55.4	-2.7	83	2†	29	10	41	3.45	-0.81	1.00	T.	13	7	9	14	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	....	....	....	....	....	....	....	4.66	......	1.11	0.2	15	....	....	....	....	James H. Young.
Burnside	Pulaski	773	25	....	....	....	....	....	....	....	6.27	+2.32	1.70	T.	13	....	....	....	....	C. L. Hurt.
Carrollton	Carroll	492	18	....	....	....	....	....	....	....	3.04	-0.14	0.88	....	13	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	4	....	....	....	....	....	....	....	3.25	......	1.08	0.8	12	....	....	....	....	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{f}53.8	-2.0	79^{f}	16	28^{f}	10	35	4.72	+0.62	1.18	T.	10	3^{f}	10^{f}	11^{f}	s.	P. W. Ray.
Eubank	Pulaski	1177	23	52.8	-1.0	77	2†	27	10	46	4.48	+0.43	1.02	T.	11	5	7	18	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	55.4	+0.3	76	2†	29	10	35	2.87	-0.86	0.73	T.	14	9	3	18	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Greensburg	Green	581	25	52.8	-2.2	80	2†	28	10†	41	3.73	-0.12	1.11	T.	12	2	6	22	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	....	....	....	....	....	....	....	2.24	-1.45	0.83	T.	14	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	20	54.4	-1.1	78	2†	27	10	32	3.50	-0.52	0.83	T.	11	7	5	18	ne.	W. J. Piggott.
Junction City	Boyle	985	24	54.8	+0.3	77	2†	28	5	43	2.99	-0.72	0.80	0.5	14	8	11	11	w.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	54.0	-1.4	79	16	27	10	34	4.29	+0.21	1.33	T.	10	4	14	12	ne.	John E. Stone.
Lexington	Fayette	989	30	51.8	-1.9	75	2	26	10	27	2.09	-1.25	0.55	0.3	13	5	13	12	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	55.0	+0.1	80	3	27	10	41	4.05	+0.39	0.90	0.5	12	12	10	8	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	53.2	-3.0	78	2	27	10	26	2.52	-1.55	0.80	1.0	12	2	10	18	n.	U. S. Weather Bureau.
Do (Cherokee Park)	Do	534	8	53.8	......	81	2†	25	10	36	2.92	......	0.70	1.0	14	10	5	15	s.	Wm. I. Hunt.
St. John	Hardin	777	21	52.2	-2.2	80	16	28	10†	35	3.60	-0.27	1.18	0.2	14	10	8	12	......	Sisters of Loretto.
Scott¶	Kenton	900	20	51.8	-1.3	78	2	26	10	35	3.21	+0.03	0.69	2.0	12	8	8	14	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	51.8	-2.9	77	2†	26	10†	37	2.75	-0.97	0.60	T.	12	10	10	10	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	53.2	-1.2	77	16	27	10	37	2.53	-1.94	0.50	0.4	14	8	5	17	s.	E. D. Bourne.
Williamstown	Grant	943	15	51.4	-0.9	79	3	26	10†	41	2.90	-0.20	0.83	0.9	14	6	4	20	......	Miss Rose Carter.
Woodbury	Butler	533	0	....	....	....	....	....	....	....	3.63	......	0.87	T	11	....	....	....	....	Virgil M. Whalin.
Eastern Division																				
Beattyville	Lee	650	14	54.2	+0.3	84	2	29	10†	45	4.24	-0.03	1.04	0.2	15	9	10	11	s.	A. H. Bowman.
Berea	Madison	1070	16	54.2	-1.4	79	2	27	10	34	3.59	-0.02	0.93	0.2	9	16	7	7	sw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	29	....	....	....	....	....	....	....	3.87	-0.58	1.38	T.	12	....	....	....	....	Forester Farley.
Cynthiana	Harrison	684	0	....	....	....	....	....	....	....	3.33	......	1.40	T.	10	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	29	....	....	....	....	....	....	....	3.22	-0.25	0.77	1.0	13	6	8	16	e.	J. V. Oldham.
Farmers	Rowan	668	10	52.2	-2.2	79	2	26	10	42	5.75	+1.25	1.55	1.0	13	18	1	11	w.	Durwood Cassity.
Jackson	Breathitt	776	6	....	....	....	....	....	....	....	3.55	+0.03	1.00	T.	11	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	3	....	....	....	....	....	....	....	5.17	.....	1.50	T.	14	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	14	....	....	....	....	....	....	....	2.90	-0.32	0.98	T.	15	....	....	....	....	Miss Carrie S. Adams.
Manchester	Clay	1400	8	....	....	....	....	....	....	....	3.48	+0.13	0.95	T.	9	....	....	....	....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	53.0	0.6	86	2	28	10†	42	3.67	+0.24	1.23	1.8	14	9	7	14	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	54.4	-1.8	79	25	29	11†	37	4.44	-0.35	1.07	T.	8	14	11	5	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	51.6	-2.0	78	2	26	10†	38	4.11	+0.19	1.96	1.0	16	9	2	19	sw.	W. R. McKee.
Pikeville	Pike	634	12	....	....	....	....	....	....	....	5.10	+1.20	1.10	1.0	9	....	....	....	....	I. M. Williams.
Richmond	Madison	926	24	53.1	-2.4	76	15	27	10	34	4.02	+0.40	1.20	T.	15	11	6	13	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	56.0	......	81	2	30	10	44	....	....	....	....	....	17	3	10	......	O. A. Lund.
Williamsburg	Whitley	939	20	55.4	-0.3	82	19	29	10†	46	5.17	+0.77	1.40	T.	14	7	9	14	w.	N. C. Jones.
State averages and extremes				53.9	....	87	3	25	10	46	4.07	......	2.57	0.3	12	8	8	14	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for April, 1918.

Stations	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Western Division																															
eaver Dam .G		.62	.22	.05			.16	.03			.05					.86	.25			.67	.10			[illegible]	.11			.12	.06		[illegible]
landville .M	.04	1.86	.22			T				.10	.06				.82		.36	.18	.18	1.57	.10			.07	[illegible]			[illegible]			[illegible]
alhoun .G	T	.76	.12			T				T	.09	T			T	.56	.06		.30	1.01	.20	.01	.02	.53	T.	T.		.14			[illegible]
arlington .G		1.04	.22	.04			T				.03					.88	.08		.07	1.32	.34	T		T.	.18			.30			[illegible]
reenville .G		1.20	.10				.14				.01						.80		.58	.90	.10							.23			[illegible]
enderson .O	.08	.46	.88	T			.04				.04					.15	.16			1.30	T.	.08		.08	.75	T		.62			[illegible]
opkinsville .C		1.10	.35			.26	.18				T					.70	.28		1.08	.24		T		T	.12	T		.47			[illegible]
arion .O	T.	.98	T.			T.				T					T		.18		.38	2.00	.20		T.	.10	T.	.70		.02			5.22
ayfield .M		.90	1.30								.05					.55	.20		.48	2.35	.03			.20	.06	.12		.30			[illegible]
wensboro .O	T.	.52	1.28								T					.31	.03			.55	.49	.05		.14	.37	T		.07	[illegible]		3.91
aducah .O	.40	1.07	.44			.04				.02	.01				T.	.96	.60		.15	1.06	.28			.02	.01	.20		.18			5.71
rinceton .G		1.50								T						1.32	.25		.42	1.82	.21				.21			[illegible]			6.69
ussellville .G			.40			.17	.38	.16			.04					.59	.14	.05		.91	1.11	.02	.01						[illegible]		[illegible]
Central Division.																															
lpha .C	.20	.25	1.40	.15			2.57			.02						.65	.25		.20	.95		.26				.85		T	T		[illegible]
nchorage .O		.41	.36			.04	.08			.11						T	.09			.66	.31		T	.75		T		.04			2.85
ardstown .S		.45	.50	.15			.14	.08			.07					.13	.04				.70	.05		.10	.09	.08					2.88
owling Green .G		.70	.20	.20			.30				T.					.60	.12	.10		.08	1.00	.02		.05		.10		.08			[illegible]
rownsville .G		.72	.99	.42			.21	.08			.02					.62	.07	.08		T.	1.11	.03		.02		.21	.02		.06		4.66
urnside .C		.17	.86	.05			.55	1.70	T	T.						.30	.05	.15			1.10			.30		.84	.05		.15		6.27
arrollton .O		.05	.63				.02	.10		T.	.16						.25				.88	.04		.17	.65	.02	.03		.04		3.04
loverport .O		.68	1.08	T.			.01				.04					.20	T.	T.		.01	.53	.07		.22	.32		T	.01	.08		3.25
dmonton .G	.41	1.18				T	T			T						.55	.18	.40	.80	.72	.12			T	.06	.30		T.			4.72
ibank .C			.95	.90			.32	.30		T.						.17		.13			1.02			.08		.50	.05		.06		4.48
rankfort .K		.25	.12				.14	.10		T	.05					.06	.03	T		.14	.73	.08		.15	.55	.34	.03				2.87
ranklin .G																															
reensburg .G		.45	1.11	.10			.24	T.			T					.32	.01	.06			.85	.05		.14	T	.36			.04		3.73
igh Bridge .K		.14	.50				.08	.12		.02						.12	.06	T		.03	.83	.05		.12	.06	.08	.03				2.24
vington .O		.55	.77			.02				T.	T					.28	.15		T.	.83	.22		.25	.33		.03		.07			3.50
unction City .K		.25	.80			.01	.14			.05						.09	.08			.42	.44	.02		.23	.06	.20		.10			2.99
eitchfield .G	.58		1.33				.27			T.						.71	.13		.05	.90	.14		*	.18							4.29
exington *** .K	T.	.06	.55			T	.35		T	.05	.01					.06	.49		.02	.51	.03		.14	.14		.08		T			2.49
oretto .S		.50	.90			.10	.80			.05						T	.40		.20	.30	.70		T	.40		.50		.10			4.05
OUISVILLE*** .O	.31	.04	.29			.06				.10					T.	.02	.29		T	.49	.07		.02	.80		T		.03		T	2.52
Do. (Cherokee Park) .O		.37	.28			.05	.18				.10				T.	.02	.24		T	.37	.39		.05	.01	.70	.06		.10			2.92
. John .S		.48	.90	T.			.13	.02		T	.05					.25	.08	T		T	1.18	.02		.18	.12	.10	.04	.05	T.		3.60
ott .L	.03		.65			T.	.22	.09		.15	T.					T	.69		T.	.33	.44		.06	.47		.06		.02			3.21
elbyville .S		.38	.60				.09	.06		T	.06					.05	.11				.50	.20		.10	.20	.40					2.75
aylorsville .S		.50	.45			.03	.09		T.	.06	T.	T.			.10		.04		.01	.44	.03		.16	.34	.02	.26		T			2.53
illiamstown .L		.03	.60				.05	.01		T	.09						.03			.03	.83	.03		.03	.53	.03	.55		.06		2.90
oodbury .G		.81	.42	.10			.21				T.					.87	.03			.41	.64	.03						.07	.04		3.63
Eastern Division.																															
eattyville .K	.04	.04	.56	.07			.25	.81		.04	.05					.07		.10			1.04	T.		.12		.85	.18		.02		[illegible]
erea .K			.85				.40	.20		.03	T.						.08			.57	.93					.51		.02			3.59
atlettsburg .B			1.38				.05	.78			.15							.40		.04	.51			.12	.11	.11	.11		.11		3.87
ynthiana .L			1.40				.20	.25		T	.20						T.	.30		.05	.50	.10			.30	T	T	.03	T.		3.33
almouth .L			.69				.10			.12	.05						.28			.07	.77	.06		.05	.50	.17	.30		.06		3.22
armers .L			1.45				.45	.30		.05						.10	.13			.35	1.20		.27	.15	.10	1.00			.20		5.75
ckson .K	T.	.02	.45	.10	T.		.20	1.00	.03	T	.02		T.			T		T.			.63				T	.75	.10		T.		3.55
ondon .C	.08	.05	.45	.40	.02		.20	1.50			T.					.15	.02	.08			.97			.25		.75	.25				5.17
ouisa .B	.07		.70	.03			.13	.98	.03	.16	.03	T.	T.			.08	T.	.11		.11	T.			.09			.22	.08		.08	2.90
anchester .K			.87	.18	.09			.95			T.					.38		.42			.21			.15		.23					3.48
aysville .O		.02	.99				.07	.07		.04	.10						T.	.27		.04	1.23	.16		T	.38	.03	.20	T	.07		3.67
iddlesboro .C	.03		1.05				1.07	.64		T						.47	.52										.63			.03	4.44
ount Sterling .L		.05	.50	T			.09	.31	T.	.08	.03	T.				.09	.22	.03		.02	1.96	.05			.10	.43	.06		.09		4.11
keville .B			.65		.40		.41	.92	.38	.39														1.10		.23	.62				5.10
ichmond .K		.03	.80				.05	.32		.03	.30					.05	.16	.15			1.20	T.		.25	.25	.30	.10		.03		4.02
eeksbury .B																															
illiamsburg .C	T.	.45	.32	.48			.65	1.40	.05	T.	T.					.05	.15	T.		.10	.54			.22		.53	.08		T.	.15	5.17

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

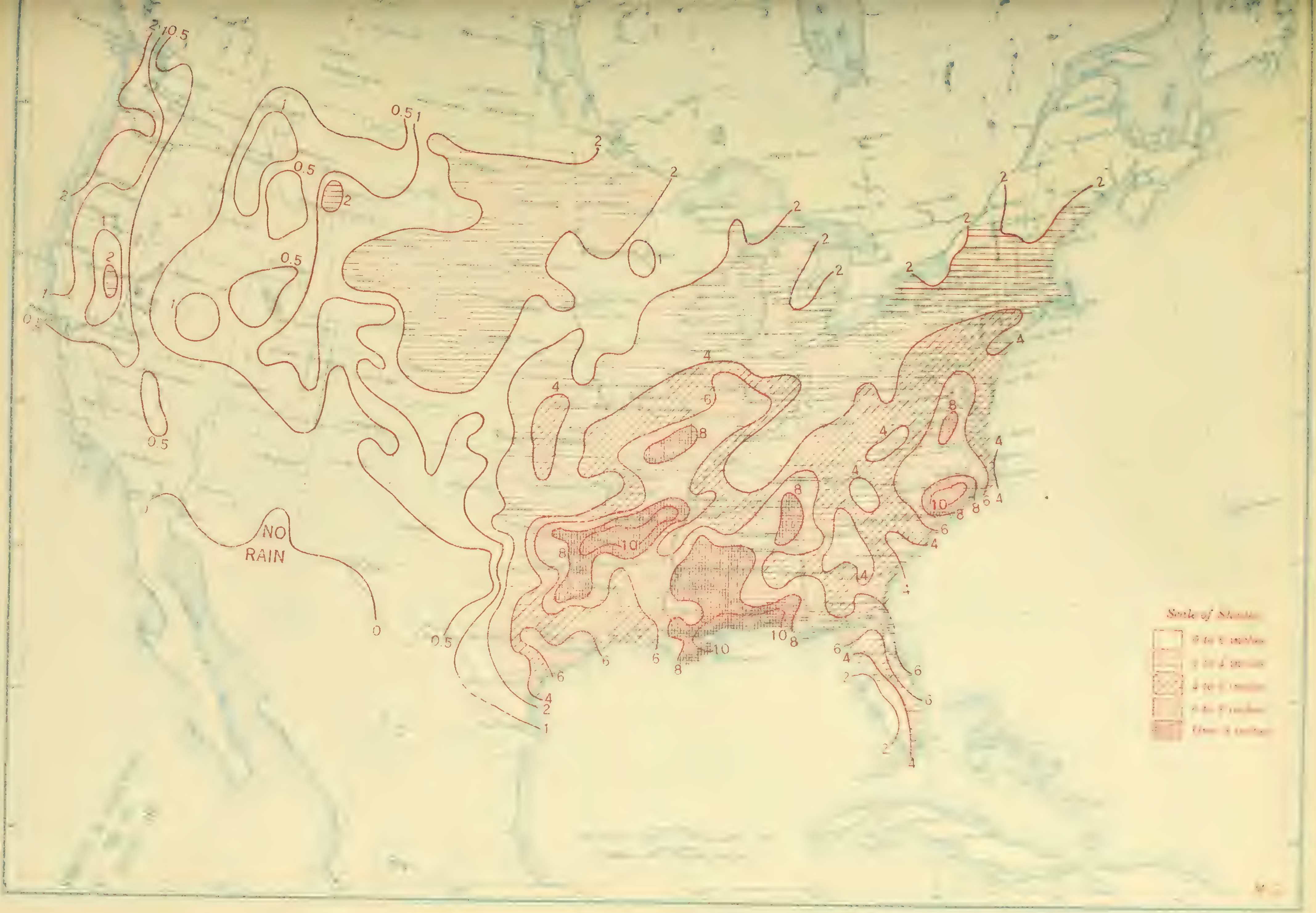
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for April, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	74	80	73	58	60	60	63	59	50	40	48	50	60	68	75	80	70	71	65	65	50	70	67	58	70	58	75	73	74	62	..	64.2
	Minimum	55	56	57	47	34	35	38	42	33	29	29	33	30	34	39	44	59	44	46	45	43	40	44	46	43	45	39	42	44	41	..	41.9
Blandville	Maximum	74	81	72	59	61	61	66	59	49	45	46	52	62	65	71	81	72	71	68	59	47	71	71	53	69	57	74	67	71	64	..	63.9
	Minimum	53	54	58	45	39	54	48	43	28	29	34	36	36	44	50	56	58	47	51	46	38	46	47	47	44	46	44	61	52	45	..	46.0
Calhoun	Maximum	74	79	78	65	63	58	65	64	53	46	47	51	64	67	72	83	79	75	64	64	57	70	70	57	69	64	74	72	75	68	..	66.2
	Minimum	55	55	57	47	34	49	47	41	30	27	30	33	30	36	43	56	61	46	48	42	39	42	45	44	42	46	41	60	48	43	..	43.9
Earlington §§	Maximum	77	81	75	61	68	62	66	61	49	37	48	51	64	69	78	85	70	76	68	67	48	72	71	56	76	56	78	69	77	63	..	66.1
	Minimum	55	55	57	48	35	35	48	44	32	30	30	33	30	38	37	47	58	34	43	45	43	41	45	47	43	45	39	40	47	43	..	42.2
Greenville	Maximum	72	81	87	68	65	67	65	66	59	51	51	55	64	69	80	83	84	75	76	70	60	70	72	70	74	74	80	79	78	73	..	70.6
	Minimum	57	55	60	47	35	50	48	43	31	29	31	30	29	35	40	57	59	45	48	44	40	45	47	50	43	49	40	60	39	40	..	44.2
Hopkinsville	Maximum	80	85	80	63	66	67	65	63	49	39	46	52	65	68	78	85	72	69	65	48	75	73	75	68	77	56	77	72	76	68	..	67.4
	Minimum	49	53	57	50	39	43	50	44	33	30	31	31	33	33	46	53	58	44	45	42	39	40	44	45	44	45	39	40	47	43	..	43.0
Marion	Maximum	76	82	76	60	62	60	66	58	48	45	45	50	62	68	74	80	73	75	66	61	55	69	71	62	72	65	75	70	71	63	..	65.3
	Minimum	55	55	60	45	35	51	43	41	30	28	32	30	27	34	47	55	60	41	49	45	38	43	43	44	43	44	43	59	49	46	..	43.8
Mayfield §§	Maximum	77	81	69	58	61	63	62	59	48	43	44	52	61	65	71	80	67	72	68	52	53	70	73	64	73	73	76	67	72	65	..	64.6
	Minimum	49	49	58	47	38	41	47	45	31	30	31	33	36	37	38	50	58	43	48	47	40	41	49	51	45	48	42	61	50	47	..	44.3
Owensboro §§	Maximum	74	78	65	53	59	57	62	56	49	36	47	50	63	67	75	81	69	71	62	61	46	68	61	49	66	56	72	67	72	58	..	61.7
	Minimum	47	55	56	46	36	36	47	42	32	29	30	36	31	35	39	49	58	45	47	43	37	41	45	47	43	45	45	55	46	45	..	42.9
Paducah (Lone Oak)	Maximum	75	83	81	62	64	63	68	61	60	48	43	54	64	67	75	85	80	75	71	71	56	72	74	68	75	66	77	81	75	69	..	68.8
	Minimum	54	54	57	46	38	47	42	45	30	28	33	35	38	43	48	55	59	48	51	45	38	45	47	46	45	38	44	60	52	47	..	45.3
Princeton §§	Maximum	81	84	78	57	64	59	69	58	48	36	45	49	62	69	81	84	69	75	73	64	..	47	58	72	58	56	77	70	75	..	..	^{b}64.9
	Minimum	56	57	64	48	36	37	48	44	31	29	35	29	30	42	48	56	61	41	43	51	42	..	43	43	44	49	40	42	45	46	..	^{a}44.1
Russellville §§	Maximum	76	79	79	60	63	59	57	58	45	35	50	50	60	65	76	79	70	73	67	64	46	69	75	70	73	59	77	72	74	64	..	64.8
	Minimum	52	54	55	49	30	35	46	44	33	29	30	30	31	33	39	47	59	48	47	48	42	40	42	50	44	52	38	40	46	44	..	42.6
Central Division.																																	
Alpha	Maximum	70	77	77	67	64	60	63	52	50	36	55	47	49	61	73	72	68	71	72	72	57	68	73	74	78	62	73	71	66	63	..	64.7
	Minimum	58	56	57	52	35	45	52	50	36	29	33	39	36	37	42	50	57	49	52	57	45	44	56	50	47	58	50	52	55	51	..	47.7
Anchorage	Maximum	73	78	70	57	57	65	58	58	48	41	47	46	61	67	75	78	72	71	55	66	58	66	61	60	62	64	72	72	76	65	..	63.3
	Minimum	53	53	52	40	31	42	47	38	30	26	31	36	31	31	48	57	60	43	43	45	39	40	43	41	41	53	48	56	41	38	..	42.6
Bardstown §§	Maximum	75	81	69	55	62	66	57	60	42	36	47	51	62	75	80	80	72	75	64	68	46	65	61	55	66	64	77	74	77	65	..	64.2
	Minimum	57	54	54	43	31	32	42	43	31	27	27	35	32	32	40	41	60	46	46	46	43	42	41	45	43	44	43	44	45	39	..	41.6
Bowling Green §§	Maximum	79	83	80	60	70	59	59	63	54	35	55	50	63	69	79	83	71	78	69	68	44	70	78	69	75	65	80	75	79	67	..	67.6
	Minimum	53	55	55	49	34	35	46	45	34	29	30	33	32	33	42	42	60	49	47	50	43	41	43	47	44	45	41	46	49	44	..	43.2
Edmonton	Maximum	64	63		64	..	64	60	59	.	43	44	49	55	68	..	79	70	72	72	69	59	65	..	75	..	72	77	76	77	..	..	^{g}65.0
	Minimum	45	45	.	40	..	33	51	37	..	28	31	32	32	33	..	45	58	59	43	52	42	40	..	44	..	44	41	58	49	..	..	^{g}42.7
Eubank §§	Maximum	72	77	72	52	61	67	54	53	38	33	50	47	51	77	76	77	69	71	72	73	49	62	72	69	69	65	74	73	72	63	..	63.7
	Minimum	44	53	55	42	31	32	41	48	31	27	27	32	33	31	38	45	55	49	44	50	44	39	42	49	41	43	42	49	50	46	..	41.8
Frankfort	Maximum	73	76	76	65	58	68	67	56	54	45	48	48	59	67	74	76	76	72	70	69	63	65	64	59	65	65	72	75	76	75	..	65.9
	Minimum	55	53	57	42	33	39	52	44	32	29	34	39	39	33	39	57	57	49	45	48	43	42	45	45	43	55	50	57	45	44	..	44.8
Franklin	Maximum			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	74	80	77	55	62	64	58	58	43	35	52	51	57	67	77	78	71	72	63	69	47	63	73	65	66	62	75	75	75	65	..	64.4
	Minimum	49	54	55	44	33	34	47	45	33	28	28	30	30	30	37	37	58	47	40	45	44	40	41	48	42	44	42	43	48	43	..	41.3
Irvington	Maximum	72	78	75	62	57	63	62	60	50	42	48	47	58	66	75	78	71	70	66	66	62	65	61	49	63	62	73	70	75	65	..	63.7
	Minimum	57	56	57	43	34	45	50	50	31	27	34	38	33	37	43	57	62	50	48	42	41	42	42	43	43	54	47	61	45	44	..	45.2
Junction City	Maximum	73	77	75	69	60	71	57	57	53	38	50	49	65	68	76	77	76	72	71	72	67	64	71	64	65	70	73	75	75	71	..	66.7
	Minimum	55	54	56	42	28	32	49	44	29	28	32	39	42	29	33	56	56	47	42	45	42	40	42	45	42	54	43	58	47	40	..	43.0
Leitchfield	Maximum	75	78	75	63	59	60	59	59	49	45	48	49	59	68	76	79	71	71	64	66	61	66	68	57	66	60	74	72	75	62	..	64.5
	Minimum	55	53	55	44	32	43	50	42	31	27	30	33	32	35	42	55	59	48	49	46	40	41	44	43	42	52	41	58	46	41	..	43.6
Lexington	Maximum	70	75	65	49	56	67	55	52	37	33	45	43	56	65	74	73	70	68	59	70	52	59	59	50	61	62	72	73	73	59	..	60.1
	Minimum	56	54	44	35	29	41	48	34	29	26	33	35	35	44	52	57	56	53	43	46	40	39	48	40	41	52	47	54	50	42	..	43.4
Loretto	Maximum	73	77	80	67	60	68	60	60	58	48	50	47	60	69	76	77	78	71	70	70	65	64	65	66	65	64	73	75	77	70	..	66.8
	Minimum	54	54	55	42	30	38	50	43	30	27	31	38	31	28	39	55	60	50	43	46	40	40	50	45	43	55	39	58	45	40	..	43.3
Louisville	Maximum	72	78	63	54	57	64	59	54	47	36	48	44	60	66	74	78	71	71	55	65	50	65	62	53	62	64	71	70	75	60	..	61.6
	Minimum	56	56	46	41	34	44	45	36	31	27	35	38	38	42	48	58	59	53	47	46	39	44	47	42	43	53	51	56	49	31	..	44.8
Do. (Cherokee Park)	Maximum	75	81	73	59	57	64	60	56	48	45	48	47	62	67	76	81	76	73	65	66	64	69	64	60	62	66	72	71	76	67	..	65.0
	Minimum	55	52	54	40	30	40	50	39	29	25	30	35	33	34	40	56	60	48	44	43	39	39	44	40	40	53	47	56	44	43	..	42.7
St. John §§	Maximum	73	78	73	54	57	61	56	58	45	35	48	52	58	67	75	80	70	73	62	66	46	64	62	53	63	62	72	70	75	63	..	62.4
	Minimum	47	55	55	41	32	32	45	42	31	28	28	35	34	34	40	47	58	45	46	47	42	40	42	47	43	43	45	48	44	39	..	41.9
Scott	Maximum	70	78	69	56	55	67	56	52	45	38	45	52	60	67	73	74	72	70	61	65	58	66	59	54	58	60	70	74	74	61	..	61.8
	Minimum	53	51	46	35	29	40	50	38	29	26	32	34	38	32	40	57	58	49	37	42	37	37	45	40	38	52	48	55	43	42	..	41.8
Shelbyville §§	Maximum	74	77	66	55	57	67	55	58	47	35	47	45	61	66	75	77	71	72	69	65	48	64	60	60	65	62	70	72	73	62	..	62.5
	Minimum	46	52	52	40	30	30	40	40	29	26	26	34	35	34	38	43	56	46	45	46	42	43	42	44	42	50	48	48	45	39	..	41.0
Taylorsville	Maximum	73	76	73	60	56	66	58	56	46	43	48	46	57	65	74	77	72	71	63	66	59	64	59	55	63	64	73	73	76	66	..	63.3
	Minimum	55	53	54	42	32	42	52	41	31	27	33	37	34	30	37	57	60	45	42	47	42	42	42	43	43	54	44	54	42	40	..	43.2
Williamstown §§	Maximum	73	79	63	53	59	68	55	53	46	34	49	51	62	68	74	76	72	71	54	67	57	65	62	46	60	60	72	74	74	61	..	61.9
	Minimum	54	54	54	36	28	27	28	40	29	26	26	33	35	36	43	46	58	49	42	40	43	36	43	43	39	39	49	50	46	42	..	40.8
Eastern Division.																																	
Beattyville §§	Maximum	75	84	73	60	62	74	56	53	41	35	54	45	60	69	80	82	76	74	78	78	56	68	75	66	68	66	79	76	77	67	..	66.9
	Minimum	31	51	53	46	30	30	33	50	35	29	29	34	36	29	36	37	48	52	44	54	49	42	38	39	44	44	53	48	50	47	..	41.4
Berea	Maximum	74	79	85	65	63	61	60	51	50	35	45	53	56	53	64	76	73	73	72	75	59	62	62	62	66	68	76	74	73	68	..	64.4
	Minimum	60	59	56	31	38	48	48	43	32	27	31	33	53	30	42	53	41	53	52	52	40	40	42	45	42	54	46	58	50	44	..	44.1
Jackson	Maximum	70	79	68	48	59	64	62	58	54	37	53	50	63	69	73	74	71	70	58	62	55	70	63	67	58	56	70	72	74	63	..	63.0
	Minimum	43	48	45	41	29	36	48	43	31	26	33	36	35	27	34	51	48	50	38	40	42	39	49	46	41	52	49	50	47	42	..	41.3
Maysville §§	Maximum	75	86	69	51	60	71	58	55	41	38	52	54	62	70	76	78	73	75	64	75	57	79	66	39	55	62	76	77	72	66	..	64.8
	Minimum	47	49	47	38	29	33	39	46	32	28	28	35	35	31	35	36	53	53	52	43	49	40	46	42	39	48	49	50	43	42	..	41.2
Middlesboro	Maximum	72	68	77	65	65	65	61	54	49	37	36	34	44	65	73	72	71	72	78	68	44	64	76	77	79	76	78	73	70	65	..	64.3
	Minimum	54	51	50	48	30	45	48	48	35	30	29	32	34	29	37	50	53	56	60	42	40	42	39	48	44	45	48	57	54	54	..	44.5
Mount Sterling §§	Maximum	71	78	70	51	57	70	56	51	38	35	51	46	56	66	75	76	71	71	65	72	48	64	64	51	63	53	75	74	75	62	..	61.9
	Minimum	46	51	55	40	28	32	46	44	30	26	26	34	35	31	38	47	56	50	44	47	46	49	44	45	40	40	49	50	47	41	..	41.4
Richmond §§	Maximum	73	75	65	78	60	68	56	52	37	33	46	45	56	68	76	73	68	70	69	70	50	62	65	53	63	61	71	72	72	62	..	61.6
	Minimum	52	53	57	41	29	38	49	46	32	27	31	37	36	34	45	55	60	53	45	49	44	40	45	45	40	54	47	58	52	45	..	44.6
Weeksbury	Maximum	69	81	74	65	63	71	73	73	47	47	50	50	49	68	75	74	76	73	78	72	68	66	74	65	70	67	72	72	68	73	..	67.4
	Minimum	53	52	57	40	30	38	47	45	32	30	30	40	38	30	40	40	53	55	45	56	48	43	43	50	44	51	51	52	50	58	..	44.7
Williamsburg §§	Maximum	68	80	72	56	66	69	62	53	38	36	56	47	56	67	76	78	76	74	82	76	54	67	78	78	78	66	73	76	74	66	..	66.6
	Minimum	48	54	56	53	36	38	49	48	36	29	29	30	32	33	40	43	54	54	45	45	46	44	47	47	43	46	52	43	56	52	..	44.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
0
0.5
1
2
4
6
8
10
Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

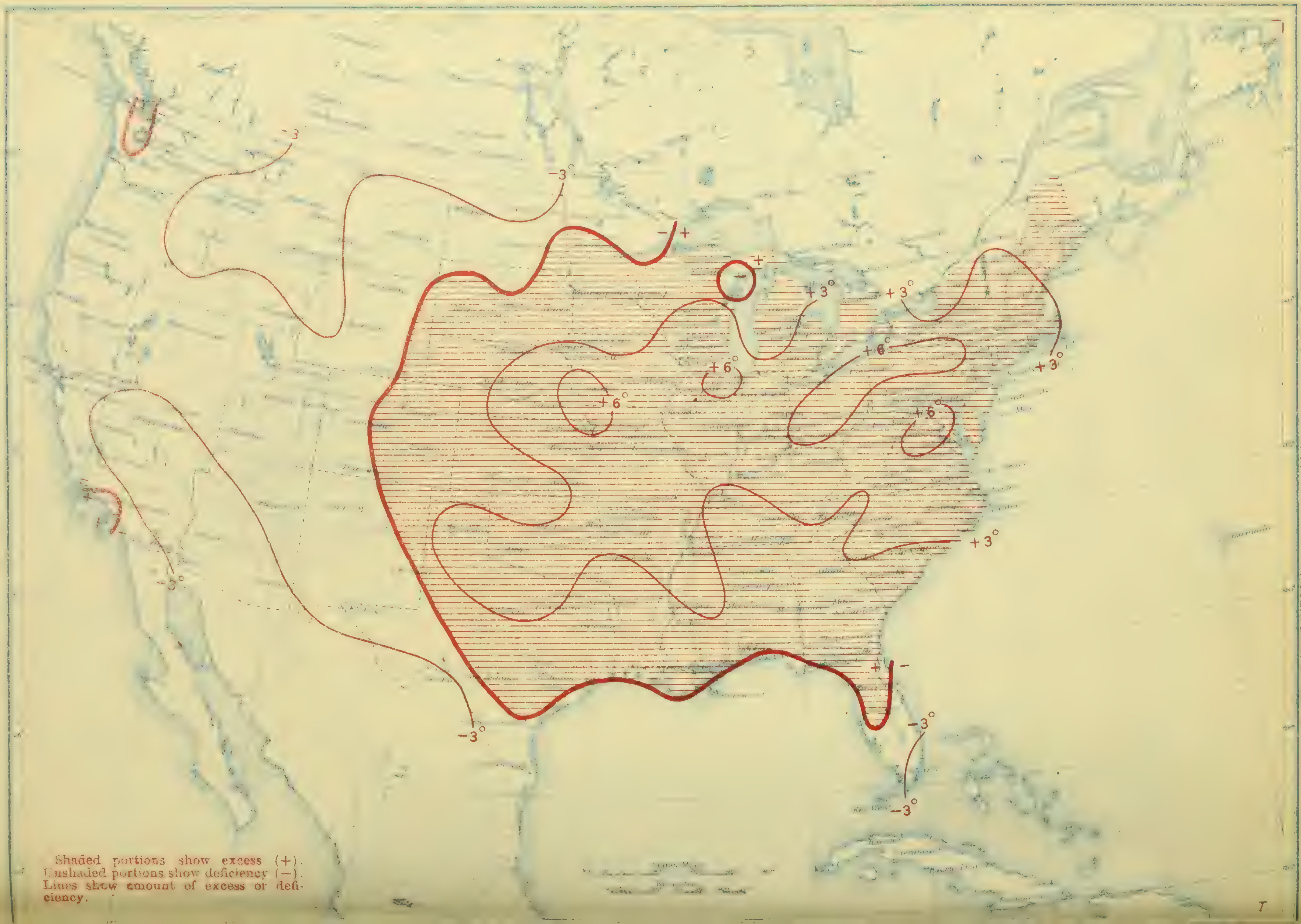
KENTUCKY SECTION

MAY, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 22, 1918

Departure of the Mean Temperature from the Normal, May, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., May, 1918. No. 5

GENERAL SUMMARY.

The first two days were unseasonably cold, minimum temperatures registering freezing or below at several stations in the central counties. Frost occurred generally over the State on the 2d, being light in western and heavy in central counties, with killing frosts at a few stations in the latter district. What damage occurred was confined mainly to early potatoes and beans. Subsequently seasonable temperatures prevailed and plant growth was rapid. During the last half of the month maximum temperatures registered generally between 80° and 95°, the weather growing gradually warmer toward the close of the month. During the last week both day and night temperatures were like those of midsummer.

Rainfall was frequent during the second week, and again in the period 18th-21st. The warm, humid weather caused wheat and rye to develop rapidly, and the month ended with the winter grain crops in such excellent condition as to closely approach or equal the best results ever obtained in this State. Wet soil interfered to some extent with corn planting; but was favorable for transplanting tobacco, which was begun about the 18th. About three-fourths of the corn crop had been planted and about one-third of the tobacco crop had been set out at the end of the month. Much of the corn had to be replanted on account of bad seed. The high temperature of the last week caused the soil to dry out quickly, and permitted cultivation of corn to begin in good time. Pastures, clover, alfalfa, and all grasses were reported in exceptionally good condition at the end of the month.

PRESSURE.

Weather conditions during the month over this section were influenced largely by high pressure areas crested over the eastern or southeastern states. The unseasonably low temperature of the first two days attended the passage of a strong "high" over the State from the interior. The important low areas were as follows: 11-13th, which passed over the state from the Southwest causing heavy rains; and 18-20th which moved to the north of the State, attended by good general rains.

The mean sea-level pressure, based on the reports of two stations was 30.08 inches. The extremes were 30.54 inches at Lexington on the 2d, and 29.56 inches at Louisville on the 29th.

TEMPERATURE.

The average temperature for the State, based on the reports from 39 stations, was 69.4°, or 3.8° above normal. Except for the first two days and the period 11-14th, daily mean temperatures were continuously above normal, the daily excess during the last week ranging from 5° to 13°. The extremes were 97° at Bowling Green on the 31st and 28° at Junction City on the 2d.

PRECIPITATION.

The average precipitation for the State, 54 stations reporting, was 4.29 inches, or 0 34 inches above normal. The rainfall was irregularly distributed over the State, ranging at the various stations between 1.78 inches at Greensburg and 7 40 inches at London. From 4 to 7 inches occured over the western counties and the upper Cumberland basin, and 4 to 6 inches in some of the northern counties bordering on the Ohio River. Over portions of the upper basins of the Green, Kentucky, and Licking less than 3 inches occurred. Showers were general in the period 6-10th, and heavy rains from the 11th to 13th. Good rains also occurred in the period 18th-21st, and scattered local showers during the last week. Thundershowers were frequent from the 7th to 12th and 18th to 28th.

WIND.

The total wind movement at Louisville was 8,483 miles, and at Lexington 9,699 miles, with average hourly velocities of 11.4 and 13.0 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 56 miles per hour from the southwest on the 9th, and at Lexington 44 miles per hour from the southwest on the 12th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 74 per cent, at 12 noon 55 per cent, and at 7 p. m. 64 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 64 and at Lexington 58.

MISCELLANEOUS.

May 8.—Storms in Warren County, in which several barns and other buildings were blown down and two persons killed, caused damage estimated at $50,000. Two barns were burned by lightning in Christian County with a loss of about $4,000. A severe hailstorm caused much damage in Simpson County. Damage to buildings by wind in Ballard County was estimated at $20,000.

May 12.—Considerable damage by flooding of low ground occurred in Jefferson County. One person was injured in an accident in Louisville due to wind.

May 22.—A residence at Beattyville was destroyed by lightning.

May 28.—A printing plant at Louisville was set on fire by lightning.

Rivers.—Good stages prevailed in the Ohio and its tributaries during the month.

ERRATA.

Lexington: March, 1918, maximum temperature on the 12th should be 59 and mean maximum for month 59.8; April, 1918, monthly sunshine percentage should be 34.

COMPARATIVE DATA FOR MAY.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in or more
1889	63.6	− 2.0	94	28	4.03	+0.08	
1890	63 9	− 1.7	93	32	4.22	+0.27	..
1891	62.6	− 3.0	90	29	1.78	−2.17	..
1892	64.6	− 1.0	90	36	5.49	+1.54	
1893	63 2	− 2.4	96	37	5.59	+1.64	
1894	64.5	− 1.1	99	32	3 54	−0.41	
1895	63 9	− 1.7	99	29	3.16	−0.79	8
1896	72.2	+ 6.6	106	42	5.34	+1.39	11
1897	61.4	− 4.2	92	32	3.27	−0.68	10
1898	67.6	+ 2.0	93	31	4 52	+0.57	10
1899	68.8	+ 3.2	94	42	4.79	+0.84	11
1900	66.3	+ 0.7	96	29	3.49	−0.46	10
1901	63.7	− 1.9	97	34	2.65	−1.30	10
1902	70 0	+ 4.4	98	35	3.55	−0.40	9
1903	68.0	+ 2 4	98	29	3 09	−0.86	8
1904	65 0	− 0.6	98	33	3.05	−0.90	10
1905	68 0	+ 2.4	95	38	5.23	+1.28	11
1906	69 5	+ 3.9	95	31	2.54	−1.41	9
1907	61.3	− 4.3	93	30	5.07	+1.12	12
1908	66 7	+ 1.1	96	28	4.34	+0 39	12
1909	63 9	− 1.7	93	27	4.64	+0.69	12
1910	61 1	− 4.5	89	30	4.81	+0.86	12
1911	69 4	+ 3.8	105	29	2.46	−1.49	5
1912	66 7	+ 1 1	97	37	4 53	+0.58	10
1913	66.1	+ 0.5	99	29	2.92	−1.03	8
1914	66 5	+ 0.9	103	32	2.16	−1.79	5
1915	65 2	− 0.4	95	35	6.62	+2.67	15
1916	67 2	+ 1.6	98	33	4.02	+0.07	9
1917	58.9	− 6.7	92	30	3.43	−0.52	10
1918	69 4	+ 3 8	97	28	4.29	+0.34	8

Climatological data for May, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	69.4	+ 3.5	92	30	34	2	43	4.17	+0.39	1.52	0	4	15	9	7	sw.	Mrs. Della M. Davis.
Blandville	Ballard	445	36	[a]69.6	+ 3.1	89	30	37	1	29	6.37	+2.13	3.05	0	7	14[a]	10[a]	6[a]	sw.	E. W. Horr.
Calhoun	McLean	437	14	70.0	+ 2.6	91	28†	35	2	40	4.47	+0.86	2.21	0	7	13	12	6	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	71.8	+ 5.0	96	28	34	1	45	5.70	+0.69	2.00	0	9	22	0	9	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	71.2	......	93	28†	34	2	42	5.11	......	2.10	0	9	18	11	2	s.	C. R. Lovell.
Henderson	Henderson	327	9	......	......	......	......	......	......	......	3.66	−0.20	1.15	0	7	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	21	71.0	+ 3.4	94	29†	36	2	44	3.52	−0.71	0.81	0	7	10	17	4	s.	W. E. Graves.
Marion	Crittenden	571	19	70.6	+ 3.5	92	28	35	1†	37	4.75	+0.46	1.65	0	6	21	6	4	s.	B. C. Paris.
Mayfield	Graves	364	8	[a]69.6	+ 3.4	90[a]	28†	37[a]	1†	35[a]	5.88	+1.53	3.65	0	10	9[a]	14[a]	7[a]	s.	J. N. Davis.
Owensboro	Daviess	479	21	70.5	+ 4.2	91	30	38	1	36	4.08	+0.24	2.32	0	8	18	10	3	s.	Henry S. Berry.
Paducah	McCracken	341	18	71.8	+ 2.1	94	27	37	1	39	6.18	+2.33	2.00	0	10	20	3	8	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	71.5	+ 4.0	95	30†	34	2	44	7.00	+1.77	2.71	0	9	18[c]	0[c]	10[c]	......	Ray Baker.
Russellville	Logan	590	6	69.7	......	93	31	33	2	45	3.45	......	1.14	0	8	19	8	4	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	68.0	+ 1.4	87	31	34	2	38	5.35	+1.47	1.75	0	7	13	10	8	s.	W. W. Hicks.
Anchorage	Jefferson	700	17	68.7	+ 4.3	93	31	31	2	41	4.97	+1.24	2.32	0	11	16	13	2	sw.	C. E. Barret.
Bardstown	Nelson	637	21	69.3	+ 2.3	95	28	31	2	45	4.57	+1.04	1.30	0	8	19	2	10	s.	Chas. M. Talbott.
Bowling Green	Warren	500	27	71.8	+ 4.2	97	31	35	2	45	3.41	−0.84	1.42	0	7	14	11	6	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......	......	......	......	......	......	......	3.85	......	1.71	0	5	......	......	......	......	James H. Young.
Burnside	Pulaski	773	25	......	......	......	......	......	......	......	4.35	+0.28	1.20	0	10	......	......	......	......	C. L. Hurt.
Carrollton	Carroll	492	18	......	......	......	......	......	......	......	3.54	−0.50	1.92	0	10	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	4	......	......	......	......	......	......	......	3.56	......	2.30	0	8	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	24	......	......	......	......	......	......	......	6	......	......	......	......	......	......	......	......	P. W. Ray.
Eubank	Pulaski	1177	23	67.0	+ 2.8	90	31	30	2	37	4.42	+0.47	1.09	0	7	15	5	11	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	69.6	+ 4.7	94	31	34	2	38	3.03	−0.78	1.30	0	7	17	3	11	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Greensburg	Green	581	25	67.8	+ 2.9	93	31	29	2	44	1.78	−2.51	1.02	0	6	7	8	16	sw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......	......	......	......	......	......	......	3.55	−0.17	1.54	0	6	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	20	70.8	+ 4.5	91	28†	38	1†	32	5.86	+2.45	2.68	0	7	18	7	6	sw.	W. J. Piggott.
Junction City	Boyle	985	24	68.5	+ 4.0	92	28	28	2	47	3.75	0.00	1.18	0	9	12	10	9	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	69.8	+ 4.3	92	28†	34	2	39	3.07	−0.93	0.87	0	6	18	10	3	sw.	John E. Stone.
Lexington	Fayette	989	30	69.4	+ 5.1	91	28	36	1	25	4.13	+0.61	1.39	0	9	16	9	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	69.6	+ 4.0	94	27	29	2	44	6.50	+2.63	2.40	0	8	18	11	2	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	71.2	+ 4.5	92	28	38	1	29	4.99	+1.35	2.90	0	10	13	14	4	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	68.8	+ 3.1	89	31	34	2	39	5.05	+1.17	1.87	0	10	16	10	5	sw.	Wm. I. Hunt.
St. John	Hardin	777	21	68.8	+ 4.1	94	28	32	2	44	2.25	−1.73	1.10	0	9	22	4	5	......	Sisters of Loretto.
Scott ¶	Kenton	900	20	68.4	+ 4.6	90	31	36	1	34	4.26	+0.20	2.23	0	10	11	16	4	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	68.0	+ 3.0	91	31	32	2	42	5.61	+1.49	1.85	0	9	8	17	6	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	68.2	+ 3.7	92	30†	29	2	43	3.59	+0.12	1.17	0	9	13	12	6	sw.	E. D. Bourne.
Williamstown	Grant	943	15	69.4	+ 6.3	92	29†	36	2	34	2.90	−0.65	1.80	0	7	12	9	10	......	Miss Rose Carter.
Woodbury	Butler	533	0	......	......	......	......	......	......	......	2.43	......	1.02	0	6	......	......	......	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	68.1	+ 4.0	94	29†	32	2	49	5.43	+1.28	1.10	0	11	19	6	6	s.	A. H. Bowman.
Berea	Madison	1070	16	69.4	+ 3.6	93	28	30	2	43	3.78	−0.20	1.42	0	11	21	5	5	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	29	......	......	......	......	......	......	......	3.47	−0.71	0.73	0	11	......	......	......	......	Forester Farley.
Cynthiana	Harrison	684	0	......	......	......	......	......	......	......	5.70	......	1.45	0	7	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	29	......	......	......	......	......	......	......	3.25	−0.42	1.00	0	9	16	8	7	se.	J. V. Oldham.
Farmers	Rowan	668	10	67.2	+ 3.5	92	30	36	3	44	2.51	−1.55	1.25	0	6	20	6	5	w.	Durwood Cassity.
Jackson	Breathitt	776	6	......	......	......	......	......	......	......	4.94	......	1.10	0	12	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	3	......	......	......	......	......	......	......	7.40	......	2.60	0	10	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	14	......	......	......	......	......	......	......	3.04	−1.18	0.83	0	12	......	......	......	......	Miss Carrie S. Adams.
Manchester	Clay	1400	8	......	......	......	......	......	......	......	3.17	+0.27	1.32	0	6	......	......	......	......	Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	68.4	+ 3.3	96	31	33	2	46	4.59	+0.54	1.93	0	11	21	2	8	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	68.2	+ 4.1	94	29†	33	2	37	2.92	−1.37	0.54	0	8	19	2	10	sw.	W. R. McKee.
Pikeville	Pike	634	12	......	......	......	......	......	......	......	5.39	+2.63	1.30	0	11	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	69.4	+ 3.9	92	28†	35	2	35	2.41	−1.17	0.66	0	10	19	4	8	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	69.3	......	90	29†	45	14	38	2.60	......	1.70	0	3	20	6	5	......	O. A. Lund.
Williamsburg	Whitley	939	20	68.6	+ 2.3	92	29†	33	2	43	5.73	+1.65	2.43	0	10	14	7	10	w.	N. C. Jones.
State averages and extremes				69.4	......	97	31	28	2	49	4.29	......	3.65	0	8	16	8	7	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for May, 1918.

Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																
Beaver Dam‡‖ G.							T					1.52	86						1.14		65			T					T			4.17
Blandville M.						.39	1.93		T.	.08	1.00	2.30						T	.15				52									6.37
Calhoun G.							.16	T		03	1.02	2.21	.40			T.		.24	T	T	.41		T									4.47
Farlington‖ G.							.14	.11		T.		2.00	1.95				T	.35	.46	.06	.50			.13								5.70
Greenville G.											.50	2.10	.30					.85	.24	.23	.10		.14					.65				5.11
Henderson O.							.62	.16			.94	1.15	.75						.02	.02												3.66
Hopkinsville‡‖ C.								.51				.79	.33					T.	.33	T.	.12		T	.81	.63		T					3.52
Marion O.						1.05	.32				1.14	1.65						13	T.				.46									4.75
Mayfield‖ M.							.25	.22		.08		3.65	.55						.15	.12	.55		13	.18								5.88
Owensboro‖ O.	T.										.03	2.32	36				.53	.04	.35	T.	.14	.31							T			4.08
Paducah O.							.60	1.16		.23	.93	2.00						.02	.01	.24	.01		98									6.18
Princeton‖ G.							.07	.76				2.71	1.53						71	.63	.07			50				.02				7.00
Russellville‖ G.								.32	1.14				.40						.26	.76	.23			.18					16			3.45
Central Division.																																
Alpha C.								1.00	T.	T.	.35	1.75	.55				T.			1.20		.36	T		T.	.20	T					5.35
Anchorage O.								.03	.33		1.43	2.32	.10					.28	.27	.02	12			.05		02						4.97
Bardstown‖ S.										.88		.73	1.30						.08	.30	.90	.08						.30				4.57
Bowling Green‖ G.								.05	.62	.02		.60	1.42						.60	.10										T		3.41
Brownsville‡‖ G.									.16			.49	1.43						.06		1.71											3.85
Burnside‖ C.							T.		.40	T.		.36	1.20	.08						.85	.12		.45	.68			.04	.17				4.35
Carrollton‖ O.							.01	.17		.22		1.92	.65						.08	.25	.01						T.	.13		.10		3.54
Cloverport‖ O.	T.						T.	.02		T.		2.30	.53					T.	.53	T.	.05	.07		.01					.05			3.56
Edmonton G.																																
Eubank‖ C.									.10	.96		.71	1.09							.42	1.09		.05									4.42
Frankfort‖ K.								.02		.23		1.02	1.30						.33	.05	.08		T.									3.03
Franklin G.																																
Greensburg‖ G.									.07	.05		.40	1.02							.05	.19											1.78
High Bridge‖ K.										.20		.53	1.54							.65	.41		.22									3.55
rvington O.	T.						T.	T.	.72		1.05	2.68	.03					73						T.			.33	.32				5.86
unction City K.									.34	.30	.31	T.	1.18						1.10	.24			.14		.04		.10					3.75
eitchfield G.							T.	.32			.87	.63						.10	.41	.74												3.07
Lexington *** K.							.01		.25	.10	.96	1.04	.35					.05	T.	.79	.59			T.			T.					4.13
Loretto S.								.50	2.40		.50	.10	1.90						15	.65	.30											6.50
LOUISVILLE*** O.							.04		.49		2.31	1.32						.25	.08	T.	.14			.05			.01	.30				4.99
Do. (Cherokee Park) O.							.12	.02	.80		1.11	1.87	.25					.30	.26		.23			.09								5.05
t. John‖ S.								.02	.03	.22	T.	1.10	.30				T.		.21	.05	.31			.01								2.25
cott L.							.20		.14		.56	2.23	.27				T.	T.	.16	.10		.36					.17	T.	.07			4.26
helbyville‖ S.								.03		.15		1.25	.85						.87	.35	1.85							.25	.01			5.61
Taylorsville S.							T.		.36	.09	1.17	.69	.12					.17	.36	.62	.01			T.			T.	T.				3.59
Williamstown‡‖ L.							T.	.04	.03	.13		.77	1.80						.01	.12												2.90
Woodbury‖ G.												.68	1.02						.55		.12			.04					.02			2.43
Eastern Division.																																
eattyville‖ K.							.07			.51		.35	1.10	.60						.70	.25	.35	.58					.10			.82	5.43
erea K.							.38	.10	.24	.38	.42	T.	1.42						.01	.12	.10				.28			.33				3.78
atlettsburg‡ B.	.04									.40	.10	.52	.65	.73						.12	.13		.12					.56		.10		3.47
ynthiana‖ L.					T.	.12			T.	.20		.70	1.40					T.		.70	1.45			T.				1.13				5.70
almouth‖ L.								.04	.55	.14		1.00	.96						.07	.08								.20	.21			3.25
armers L.										.70	.13		1.25									25					.13	.05				2.51
ackson‖ K.							T.	.10	.20	.20	T	.50	1.10	.67						.90	.45	.05	.52	.20		05		T.				4.94
ondon‡‖ C.									.10	.50		.35	1.20	.55						2.60	.55	.30	.95	.30								7.40
ouisa‖ B.										.12	.20	.15	.64	.83						.25	.15		.16			.10	.04	.32		.08		3.04
Manchester‖ K.														.16						.38	1.32	.12	.21	.98								3.17
Maysville‖ O.							T.	T.		1.09	.13	.35	1.93	.10					.42	.18	.20	T.	.02		.10	T.		.07				4.59
Middlesboro C.																																
Mount Sterling‖ L.							T.	T.		.54		.46	.70	.40			.04		T.	.33	.31		T.					.14				2.92
ikeville‖ B.	T.						T.			T.		.33	.51	.66					.20	.18	.76	.13	.28	1.30		.16		.88				5.39
ichmond‖ K.	T.						.03	T.		.45		.17	.66	.34				.10		.30	.20		.10					.06				2.41
Weeksbury B.											.30		1.70						.60													2.60
Williamsburg‖ C.							T.	.10	.20	.14			.93	1.03						2.43	.20	.20	.30	.20								5.73

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for May, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	61	74	78	80	83	81	80	83	88	75	72	74	70	74	85	86	84	79	83	84	87	85	78	88	88	89	90	90	88	92	91	81.7
	Minimum	39	34	35	48	47	60	62	58	62	70	56	52	49	48	49	45	66	62	64	64	63	65	61	60	62	70	71	62	65	65	66	57.1
Blandville	Maximum	61	70	76	79	78	78	74	74	84	78	72	71	70	76	78	81	82	80	83	70	84	85	75	87	87	87	88	85	85	89	..	a79.0
	Minimum	37	44	47	54	57	64	64	62	68	58	54	55	46	52	54	61	65	68	64	60	63	69	63	63	70	72	68	68	69	69	..	a60.3
Calhoun	Maximum	63	75	81	83	84	79	79	86	87	84	70	72	72	79	82	83	83	82	84	84	86	87	82	88	88	88	89	91	90	91	90	82.6
	Minimum	36	35	43	53	53	51	64	59	60	60	50	61	45	48	52	55	66	53	62	63	62	67	60	60	71	70	65	65	66	66	65	57.4
Earlington §§	Maximum	64	72	83	86	82	83	78	87	90	72	75	74	73	82	85	86	88	82	88	87	90	91	78	93	93	94	95	96	96	95	95	85.1
	Minimum	38	34	42	54	54	62	69	59	64	70	54	53	47	48	50	50	57	64	62	64	64	65	63	60	63	73	68	65	65	67	67	58.5
Greenville	Maximum	67	76	80	83	86	83	81	87	90	87	76	81	73	80	82	84	83	83	84	87	85	88	89	89	89	92	92	93	89	92	93	84.4
	Minimum	36	34	40	53	51	58	67	59	65	62	50	61	47	48	50	54	60	64	61	64	63	65	61	59	71	69	68	64	65	65	65	58.0
Hopkinsville §§	Maximum	65	78	83	85	86	84	76	83	89	76	74	75	73	79	84	85	87	85	85	86	89	90	74	86	91	92	93	93	94	94	94	84.1
	Minimum	39	36	39	46	47	56	64	61	63	68	57	54	49	49	56	52	59	61	62	63	64	64	64	60	63	69	66	66	66	66	66	57.9
Marion	Maximum	61	72	78	81	81	78	80	85	85	79	72	72	73	78	82	83	83	83	84	77	86	87	76	89	89	89	90	92	90	91	91	81.8
	Minimum	35	35	43	52	55	64	64	66	67	58	53	59	43	50	51	58	63	65	63	61	61	68	62	60	71	70	69	65	69	68	75	59.5
Mayfield §§	Maximum	64	72	75	79	80	78	75	75	84	74	74	71	70	75	79	81	83	83	83	70	85	86	77	88	88	..	87	90	88	90	90	a79.5
	Minimum	37	37	45	45	53	64	64	63	67	66	58	55	44	51	52	59	62	67	64	61	61	68	64	63	67	70	..	66	68	68	69	a59.3
Owensboro §§	Maximum	61	72	79	82	82	79	89	83	87	74	70	71	69	75	80	82	82	80	83	79	82	86	78	86	89	89	90	90	89	91	90	81.3
	Minimum	38	39	43	49	55	60	64	60	67	64	53	62	47	52	55	56	62	64	64	63	63	67	61	62	71	70	68	68	68	68	68	59.7
Paducah (Lone Oak)	Maximum	64	75	79	80	83	86	81	79	87	85	74	75	78	82	83	85	86	87	88	81	88	89	90	91	93	92	94	93	90	92	93	84.6
	Minimum	37	44	50	51	52	54	66	61	68	58	54	54	50	45	44	48	59	68	64	62	62	64	64	66	63	71	68	70	69	69	70	58.9
Princeton §§	Maximum	62	78	81	85	87	83	82	85	87	70	74	73	75	83	85	87	85	86	88	85	90	96	75	85	75	93	95	94	94	95	95	83.9
	Minimum	38	34	39	47	50	61	67	61	67	68	59	61	46	53	51	55	59	65	64	63	63	67	64	62	68	69	66	66	67	66	66	59.1
Russellville §§	Maximum	61	78	80	82	84	79	75	83	86	74	79	76	70	77	82	83	86	82	84	85	86	87	76	88	90	90	90	90	91	92	93	82.5
	Minimum	37	33	35	42	52	60	61	60	61	68	54	54	49	47	48	50	61	61	63	61	62	64	63	59	61	69	68	65	65	66	66	56.9
Central Division.																																	
Alpha	Maximum	52	65	76	77	78	83	75	79	80	79	75	77	69	79	83	85	77	79	77	75	79	82	78	80	84	85	85	85	85	84	87	78.5
	Minimum	41	34	42	40	51	45	57	63	69	50	55	59	55	46	54	60	65	67	67	66	60	61	64	61	65	65	65	63	63	65	66	57.5
Anchorage	Maximum	57	72	79	82	84	81	76	81	83	76	68	76	68	75	79	82	84	79	84	84	84	87	79	88	89	90	89	89	92	90	93	81.3
	Minimum	37	31	42	47	56	54	64	56	58	58	47	61	49	46	52	54	56	58	62	52	62	64	62	58	66	65	65	62	65	65	65	56.1
Bardstown §§	Maximum	60	74	82	85	84	79	81	86	84	76	74	77	70	79	85	84	87	80	83	87	88	88	80	89	90	92	91	95	91	92	93	83.4
	Minimum	37	31	37	45	47	55	52	59	60	60	50	51	52	46	47	53	59	57	62	61	60	63	62	56	62	66	65	64	64	64	65	55.2
Bowling Green §§	Maximum	74	79	84	88	89	82	78	84	91	76	79	78	73	82	85	87	88	78	87	88	90	91	79	93	95	96	96	95	94	96	97	86.2
	Minimum	40	35	41	43	50	59	66	61	62	67	53	54	50	47	50	51	58	59	62	63	61	63	64	60	62	69	67	66	65	67	68	57.3
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank §§	Maximum	53	65	70	75	82	77	74	79	77	78	71	78	65	75	80	81	81	82	80	81	83	84	82	84	86	88	88	91	89	88	90	79.3
	Minimum	37	35	36	42	45	44	58	61	56	60	48	52	52	42	47	55	58	56	59	62	69	62	66	60	62	65	63	62	62	63	64	54.6
Frankfort	Maximum	56	70	79	82	83	80	79	80	79	79	68	79	77	75	77	82	83	84	78	85	83	88	85	86	89	90	91	93	96	91	94	81.9
	Minimum	40	34	41	47	48	58	66	60	57	60	46	62	58	47	48	55	58	58	62	62	63	64	64	59	68	67	67	66	67	67	67	57.3
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	54	71	79	81	83	78	78	83	82	77	73	78	66	74	79	80	83	80	79	85	84	87	83	87	89	90	90	92	92	91	93	81.3
	Minimum	38	29	35	41	43	53	54	58	61	63	48	53	51	44	46	51	56	55	59	62	60	66	62	59	60	65	63	62	62	64	64	54.2
Irvington	Maximum	56	70	78	81	82	79	79	81	86	80	71	73	68	75	77	83	82	79	83	83	86	86	80	87	89	89	88	91	89	90	91	81.0
	Minimum	38	38	46	54	57	61	67	62	64	58	49	63	49	49	53	57	63	64	65	67	67	69	62	69	69	73	70	67	67	68	69	60.5
Junction City	Maximum	67	75	80	81	83	81	77	82	78	77	72	79	75	75	80	80	83	81	77	81	84	86	84	87	89	89	87	92	90	90	90	81.7
	Minimum	35	28	38	43	48	50	62	58	56	65	45	68	51	43	45	52	57	57	61	63	59	59	63	56	68	67	64	63	61	63	64	55.3
Leitchfield	Maximum	58	72	80	83	83	78	81	84	88	80	73	74	70	76	81	83	83	78	83	84	86	87	82	88	90	91	90	92	90	91	92	82.3
	Minimum	37	34	41	49	50	58	65	59	62	58	49	61	49	46	50	56	58	58	61	62	61	66	61	59	69	66	67	64	64	66	66	57.2
Lexington	Maximum	52	68	76	79	80	76	75	78	77	74	68	77	63	74	79	81	82	78	74	79	83	84	76	83	86	88	86	91	89	87	89	78.5
	Minimum	36	43	52	55	59	63	63	62	61	52	46	58	50	52	58	61	64	62	62	63	61	65	62	60	70	71	71	70	72	72	74	60.3
Loretto	Maximum	59	73	80	83	84	86	80	83	81	83	81	77	75	77	83	80	83	86	78	83	86	87	86	87	90	90	94	96	96	90	91	82.5
	Minimum	37	29	38	43	47	58	67	60	60	63	63	63	50	46	42	53	59	60	56	65	60	65	64	55	70	69	64	63	64	64	66	56.7
Louisville	Maximum	57	71	80	82	84	80	78	82	84	77	68	73	68	74	78	81	82	73	85	83	84	88	75	87	90	91	89	92	90	96	92	81.0
	Minimum	38	42	54	61	63	64	65	63	58	56	49	54	50	51	59	60	64	63	64	64	64	70	63	60	73	75	72	70	71	73	75	61.5
Do. (Cherokee Park)	Maximum	58	73	81	81	82	81	75	76	84	79	68	73	66	75	79	82	81	79	83	81	82	85	80	85	87	87	87	88	87	87	89	80.0
	Minimum	37	34	44	54	54	59	63	59	58	58	47	60	48	46	52	54	59	60	62	63	63	65	62	55	67	70	68	64	66	66	67	57.5
St. John §§	Maximum	57	74	81	83	83	78	80	81	86	74	71	74	69	74	80	81	83	83	84	87	86	87	78	88	91	91	91	94	93	93	93	82.2
	Minimum	36	32	37	49	47	55	60	57	62	64	49	50	50	45	48	51	51	57	63	61	61	63	60	56	63	67	66	62	63	64	65	55.3
Scott	Maximum	57	71	79	82	85	77	80	78	80	75	63	73	67	73	81	82	79	75	75	82	83	85	72	84	88	88	86	86	89	88	90	79.1
	Minimum	36	37	47	55	55	58	63	59	57	57	42	59	50	47	50	54	59	60	63	63	65	66	66	53	71	70	67	64	65	67	69	57.7
Shelbyville §§	Maximum	57	72	79	84	85	80	78	82	81	74	70	74	67	75	80	83	83	76	78	84	85	85	78	86	89	90	89	91	90	96	91	80.8
	Minimum	37	32	42	42	50	57	57	56	58	59	45	48	50	47	50	53	58	58	61	62	61	63	62	56	59	59	67	65	65	66	66	55.2
Taylorsville	Maximum	54	72	79	82	84	79	78	80	82	78	71	77	66	74	79	82	83	79	79	82	83	88	78	82	91	91	89	90	91	92	92	80.9
	Minimum	39	29	37	40	45	57	61	56	57	59	48	62	51	44	46	53	57	56	63	63	62	64	63	56	67	65	65	63	64	64	64	55.5
Williamstown §§	Maximum	57	72	79	83	86	78	80	82	79	73	68	75	67	74	79	83	83	78	77	84	84	87	78	87	89	90	90	91	92	90	92	80.9
	Minimum	36	38	49	65	55	61	61	61	58	58	43	47	50	50	51	57	59	62	62	63	63	64	61	54	55	70	70	67	66	68	70	57.9
Eastern Division.																																	
Beattyville §§	Maximum	58	79	82	86	89	80	78	81	77	80	75	82	65	76	80	85	88	89	82	86	83	90	85	89	92	89	93	93	94	91	94	83.6
	Minimum	40	32	33	40	41	49	50	57	52	49	47	57	52	47	45	46	50	54	56	58	60	58	59	59	61	61	64	64	64	63	64	52.6
Berea	Maximum	53	73	75	83	85	79	75	76	79	74	71	79	78	75	78	83	86	73	76	83	84	88	83	85	89	91	89	93	91	90	91	80.9
	Minimum	38	30	56	63	55	58	57	54	59	59	45	65	50	45	56	56	60	62	64	64	63	67	63	66	66	62	68	64	63	65	68	58.0
Farmers	Maximum	53	75	79	85	85	77	81	75	83	77	66	75	73	77	80	85	76	77	86	77	87	88	78	88	85	88	89	87	87	92	88	80.4
	Minimum	39	37	36	50	41	48	64	64	50	64	44	60	52	42	44	50	56	54	50	58	60	59	62	57	64	63	64	62	62	61	61	54.1
Maysville §§	Maximum	58	73	83	85	88	84	83	83	81	79	69	83	67	77	82	75	82	88	75	87	82	90	84	87	92	93	93	94	95	94	96	83.4
	Minimum	39	33	39	49	47	47	52	58	50	52	46	46	53	45	45	50	52	54	54	60	62	63	60	54	57	69	65	63	62	63	64	53.3
Middlesboro	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mount Sterling §§	Maximum	53	77	77	80	84	79	80	79	78	78	72	81	65	70	80	82	80	86	73	85	86	87	79	86	90	91	92	91	94	94	94	81.2
	Minimum	37	33	41	47	53	55	62	62	58	62	43	52	55	43	46	55	56	56	56	60	60	60	65	56	58	58	60	64	65	65	68	55.2
Richmond §§	Maximum	52	70	78	80	85	76	76	82	76	75	68	78	62	74	78	80	83	78	74	82	85	86	80	86	87	88	84	92	91	92	92	79.7
	Minimum	38	35	48	52	52	62	62	61	62	66	47	58	52	46	51	58	62	62	64	62	62	65	62	60	69	70	68	68	69	69	76	59.0
Weeksbury	Maximum	70	68	73	83	84	85	80	77	78	82	85	83	77	77	73	75	73	78	78	75	76	90	78	82	89	90	90	88	90	90	90	80.5
	Minimum	53	49	52	56	51	47	50	62	55	68	49	59	55	45	58	55	57	57	63	58	57	65	63	65	64	65	65	65	70	65	66	58.1
Williamsburg §§	Maximum	58	75	80	85	86	82	76	80	79	84	82	82	64	76	81	82	81	85	77	80	83	87	82	88	87	88	90	90	92	90	92	81.9
	Minimum	43	33	43	48	43	44	57	60	60	62	50	59	60	48	45	55	54	57	59	58	59	60	60	62	62	59	64	65	62	64	64	55.4

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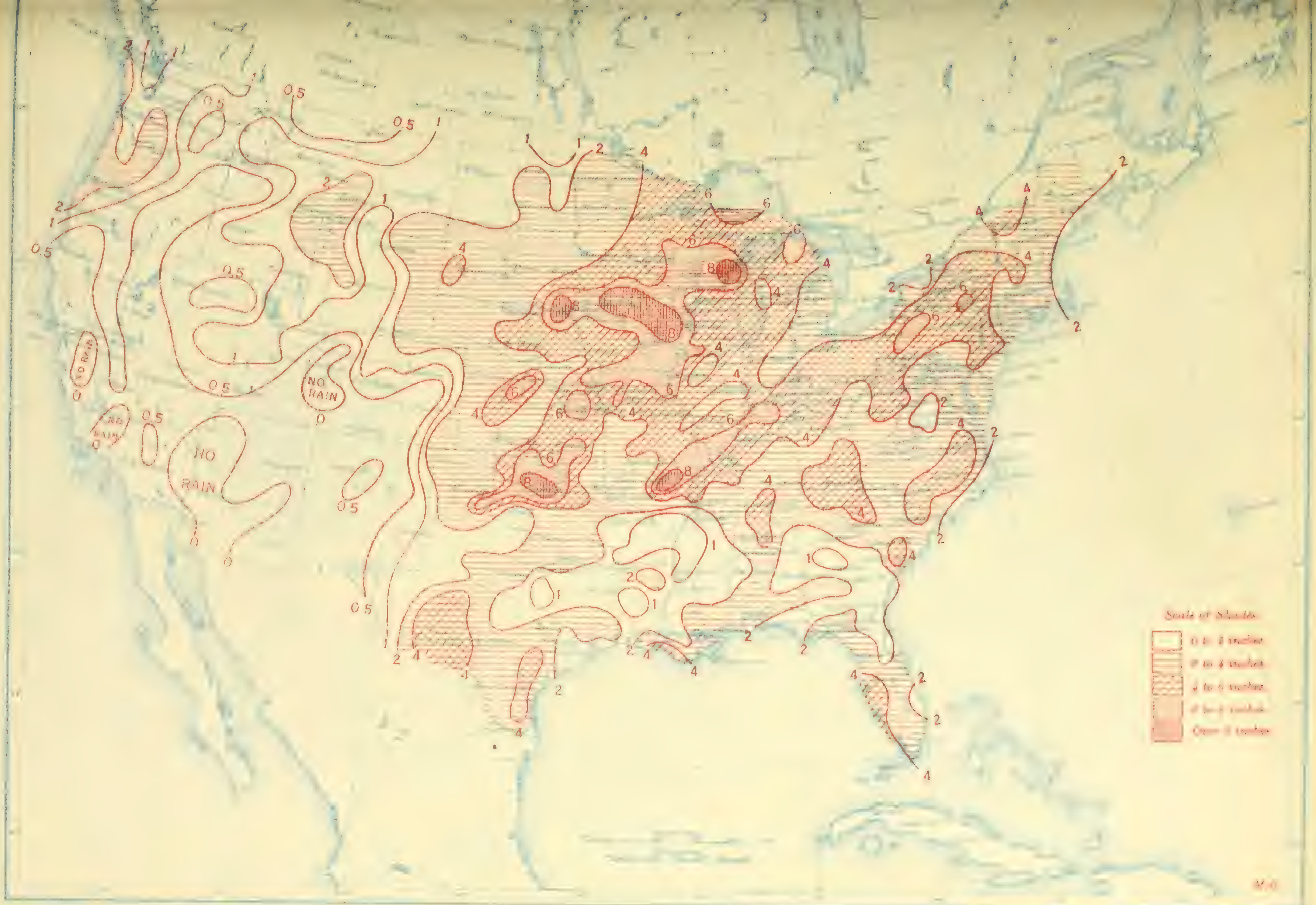
§§ Instruments are read in the morning: the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
0
0.5
1
2
4
6
8

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

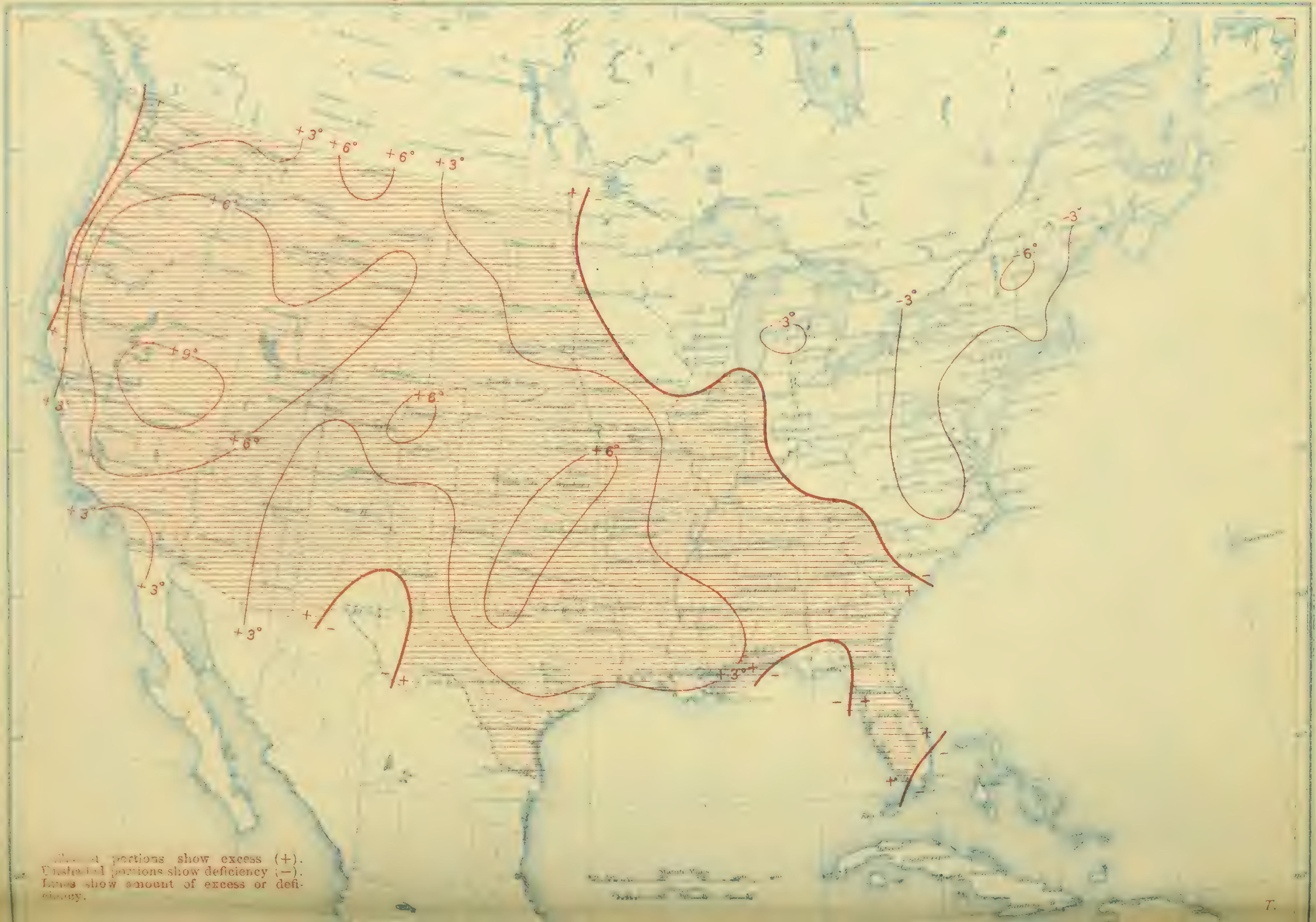
KENTUCKY SECTION

JUNE, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 22, 1918

Departure of the Mean Temperature from the Normal, June, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., June, 1918. No. 6

GENERAL SUMMARY.

Weather conditions during June were especially favorable for harvesting wheat, rye, alfalfa, and clover; but were not favorable for other crops, moisture being generally deficient until near the end of the month, and temperature much of the time below normal. Notable temperature features were the large number of cool nights, the low minimum temperatures of the 23d, and the intense heat of the 17th.

Showers occurring the 2-3d and 6-7th did not thoroughly moisten the soil, which had become very dry during the hot weather of the last decade in May. Much of the tobacco that was transplanted during these periods suffered in the dry weather hat followed. This drought in June was particularly distressng to tobacco interests, since it covered the period when transplanting should be completed; also the lack of rain in May and June closely following transplanting resulted in a poor stand and slow growth, and will make this crop late. There were some compensations, however, in the ideal harvest weather and the thorough cultivation of corn during the dry period.

The drought was broken over the central and eastern counties on the 25th, and in the western counties on the 28th; except hat limited areas in the extreme southwestern counties, and in he upper Green River basin, received only light showers and were still drought stricken at the end of the month.

PRESSURE.

The important low pressure areas influencing weather conditions over this section during the month were as follows: 6th and 10-12th low areas moved across the upper Mississippi Valley and Lake region with southern edge extending into the Ohio Valley; 17-18th an area moved eastward to the south of the State; 20th-22d, a long deep trough swept across the Mississippi and Ohio valleys and Lake region; 24-25th, a well-defined area, probably the most important of the month, moved south-eastward from the Missouri Valley across the central Mississippi and Ohio valleys, finally passing out over the Carolina coast; 27-29th, a long and shallow trough of low moved listlessly across the central valleys; and the 30th, a well-defined low covered the central Mississippi and Ohio valleys and Lake region. High pressure areas dominated during the 2d-5th; 7-9th; 13-16th; 19th, and 22-23d, the latter attended by unusually low temperature for the season.

The mean sea-level pressure, based on the records of two stations was 29.96 inches. The extremes were 30.23 inches on the 3d, and 29.57 inches on the 25th, both at Lexington.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 73.6, which is only slightly below normal. High temperatures occurred generally on only a few days, but in the western counties most affected by the drought there were several days, notably the 15-19th and 26-28th, when maximum temperature ranged between 92° and 104°. Minimum temperatures on the 23d were unusually low, being generally in the 40's The extremes were 104° at Hopkinsville on the 17th and 37° at Anchorage on the 23d.

PRECIPITATION.

The average precipitation for the State, computed from the records of 55 stations, was 3.63 inches, which is 0.55 inch below normal. The heaviest rainfall, generally between 4 and 6 inches, occurred over the eastern mountain counties, in Jefferson and Meade counties, and over a district southwestward to the lower Cumberland. In the extreme southwestern counties only about two inches occurred, while in the upper Green River basin and in portions of the upper Cumberland basin monthly amounts were less than two inches. Light to moderate showers occurred generally in the periods 2-3d, 6-7th, 20th-22d, and in the western counties on the 25th. Heavy rains were general in central and eastern counties on the 25th, and over the State in the period 28-30th. Amounts at the various stations ranged between 1.22 inches at Brownsville and 7.64 inches at London. Thunderstorms were infrequent for June, with but few reports of damage.

WIND.

The total wind movement at Louisville was 7,548 miles, and at Lexington 8,448 miles, with average hourly velocities of 10.5 and 11.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 60 miles per hour from the north on the 28th, and at Lexington 40 miles from the southwest on the 30th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 72 per cent, at 12 noon 51 per cent, and at 7 p. m. 53 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 75 and at Lexington 60.

MISCELLANEOUS.

June 30.—A residence was struck by lightning at Pleasure Ridge, Jefferson County, and the owner severely shocked. Several tobacco barns were blown down in a windstorm in Spencer County; also several head of cattle were reported killed by lightning in this storm.

Rivers.—The month began with good stages prevailing in the Ohio, but there was a steady decline which continued until checked by the rains of the 25th. After the 26th good stages again prevailed until the end of the month.

ERRATA.

May, 1918: Louisville,—Greatest 24-hour precipitation should be 2.92 inches.

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more.
1889	70.6	−3.1	99	38	5.27	+1.09	..
1890	78.4	+4.7	101	51	4.96	+0.73	..
1891	77.1	+3.4	97	51	4.48	+0.30	..
1892	75.8	+2.1	101	48	4.23	+0.05	..
1893	73.3	−0.4	97	46	4.64	+0.46	..
1894	75.6	+1.9	102	35	2.69	−1.49	..
1895	75.9	+2.2	104	47	3.63	−0.55	
1896	73.5	−0.2	98	46	4.64	+0.46	10
1897	73.4	−0.3	101	41	3.61	−0.57	9
1898	76.2	+2.5	101	45	3.90	−0.28	9
1899	76.1	+2.4	100	44	2.80	−1.38	8
1900	73.9	+0.2	100	40	6.14	+1.96	14
1901	75.6	+1.9	104	42	3.97	−0.21	9
1902	73.4	−0.3	101	39	4.75	+0.57	11
1903	68.6	−5.1	96	37	3.61	−0.57	10
1904	73.2	−0.5	99	48	3.14	−1.04	11
1905	74.8	+1.1	106	45	4.49	+0.31	10
1906	73.9	+0.2	99	42	4.53	+0.55	11
1907	70.2	−3.5	95	41	4.91	+0.73	11
1908	73.4	−0.3	102	43	4.36	+0.18	7
1909	74.5	+0.8	99	43	5.03	+0.85	14
1910	70.0	−3.7	99	36	5.20	+1.02	10
1911	75.2	+1.5	106	45	4.06	−0.12	10
1912	70.2	−3.5	95	38	3.55	−0.63	10
1913	75.0	+1.3	107	38	2.87	−1.31	7
1914	78.3	+4.6	108	45	2.30	−1.88	5
1915	71.7	−2.0	95	42	4.79	+0.61	12
1916	70.1	−3.6	99	45	4.94	+0.76	11
1917	70.9	−2.8	100	39	4.30	+0.12	10
1918	73.6	−0.1	104	37	3.63	−0.55	8

Climatological data for June, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	73.0	− 0.6	98	17	42	23	38	2.02	−1.41	0.60	0	7	20	3	7	se.	Mrs. Della M. Davis.
Blandville	Ballard	445	36	76.4	+ 1.5	101	17	53	23	31	2.07	−2.29	0.63	0	9	10	14	6	ne.	E. W. Horr.
Calhoun	McLean	437	14	75.2	+ 0.2	101	17	46	23	36	4.93	+1.30	1.61	0	10	10	15	5	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	75.8	+ 0.2	104	17	46	23	45	4.02	+0.49	2.30	0	7	20	0	10	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	^{a}76.1	......	102^{a}	17†	47^{a}	23	38^{a}	3.61	......	1.09	0	9	16^{a}	13^{a}	0^{a}	e.	C. R. Lovell.
Henderson	Henderson	327	9	.....	.....	.....	.....	.....	.....	.....	3.65	−0.58	1.86	0	5	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	21	76.4	+ 1.2	104	17	51	24	43	3.15	−1.13	2.00	0	6	12	15	3	e.	W. E. Graves.
Marion	Crittenden	571	19	74.6	− 0.3	103	17	48	23	36	4.24	+0.59	1.65	0	5	15	14	1	ne.	B. C. Paris.
Mayfield	Graves	364	8	75.8	+ 2.2	103	17	51	23	33	2.10	−0.50	0.90	0	5	11	14	5	ne.	J. N. Davis.
Owensboro	Daviess	479	21	75.6	+ 1.5	99	17	51	23	34	3.11	−0.46	1.45	0	5	13	14	3	nw.	Henry S. Berry.
Paducah	McCracken	341	18	78.7	+ 0.8	103	17	55	23	36	3.46	−1.01	1.33	0	13	22	4	4	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	76.6	......	101	16	50	23	44	6.04	......	1.85	0	6	.....	.....	.....	.....	Ray Baker.
Russellville	Logan	590	6	71.4	......	101	17	44	25	43	1.82	......	1.01	0	7	21	3	6	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	73.4	+ 0.3	93	16	47	23	38	1.86	−3.18	0.71	0	4	10	13	7	s.	W. W. Hicks.
Anchorage	Jefferson	700	17	72.4	+ 0.4	99	17	37	23	45	3.61	−0.04	1.83	0	7	18	10	2	sw.	C. E. Barret.
Bardstown	Nelson	637	21	73.6	− 1.0	102	17	39	23	47	2.45	−1.89	1.15	0	7	17	2	11	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	76.7	+ 0.8	102	16	48	23	43	1.36	−2.51	0.78	0	4	15	13	2	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	.....	.....	.....	.....	.....	.....	.....	1.22	......	0.62	0	7	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	25	.....	.....	.....	.....	.....	.....	.....	3.47	−0.91	1.75	0	7	.....	.....	.....	.....	C. L. Hurt.
Carrollton	Carroll	492	18	.....	.....	.....	.....	.....	.....	.....	3.41	+0.11	1.19	0	10	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	4	.....	.....	.....	.....	.....	.....	.....	3.06	......	2.15	0	7	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{g}72.8	− 0.3	98^{g}	16†	46^{g}	23†	39^{g}	5.22	+0.95	1.62	0	6	14^{g}	7^{g}	2^{f}	sw.	P. W. Ray.
Eubank	Pulaski	1177	23	71.9	+ 0.8	98	17	42	23	38	2.36	−1.72	0.73	0	7	14	10	6	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	74.1	+ 0.8	97	17	46	23	34	3.96	−0.24	1.67	0	8	17	0	13	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greensburg	Green	581	25	72.2	− 1.3	97	16†	46	24	39	2.02	−2.43	0.95	0	6	10	7	13	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	.....	.....	.....	.....	.....	.....	.....	4.04	+0.05	2.35	0	9	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	20	74.0	+ 0.3	95	17	45	23	33	4.16	+0.17	1.42	0	8	19	7	4	sw.	W. J. Piggott.
Junction City	Boyle	985	24	71.6	0.0	99	17	44	23	39	3.25	−0.57	1.08	0	8	17	8	5	nw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	73.6	+ 0.7	97	16†	41	23	39	2.20	−1.79	1.07	0	4	16	13	1	nw.	John E. Stone.
Lexington	Fayette	989	30	72.2	− 1.0	94	16	48	23	29	3.61	−0.38	2.04	0	10	13	11	6	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	73.6	+ 1.1	100	17	40	23	43	2.57	−1.91	0.69	0	9	16	11	3	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	73.6	- 1.4	96	16	50	23	29	4.24	+0.01	2.17	0	8	15	11	4	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	71.6	− 1.4	94	17	44	23	32	4.50	+0.94	2.62	0	8	13	12	5	s.	Wm. I. Hunt.
St. John	Hardin	777	21	72.2	− 0.1	99	18	40	23	42	2.67	−1.33	0.80	0	7	22	4	4	......	Sisters of Loretto.
Scott¶	Kenton	900	20	71.2	− 0.4	94	16	45	23	36	4.48	+0.80	2.40	0	9	14	11	5	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	72.0	− 1.5	98	17	40	23	42	3.94	−0.52	1.50	0	11	14	9	7	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	72.4	+ 0.1	96	16†	40	23	42	3.77	−0.76	1.78	0	9	16	7	7	ne.	E. D. Bourne.
Williamstown	Grant	943	15	71.9	+ 1.3	95	16†	42	23	39	3.49	−0.24	1.15	0	10	12	9	9	......	Miss Rose Carter.
Woodbury	Butler	533	0	.....	.....	.....	.....	.....	.....	.....	2.34	......	0.91	0	6	.....	.....	.....	.....	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	71.2	− 0.8	99	17	46	23	44	5.35	+0.64	1.85	0	10	18	6	6	s.	A. H. Bowman.
Berea	Madison	1070	16	73.3	+ 0.8	98	17	41	23	44	2.88	−2.00	1.30	0	9	18	8	4	sw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	29	.....	.....	.....	.....	.....	.....	.....	3.18	−1.25	1.65	0	7	.....	.....	.....	.....	Forester Farley.
Cynthiana	Harrison	684	0	.....	.....	.....	.....	.....	.....	.....	3.09	......	1.50	0	5	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	29	.....	.....	.....	.....	.....	.....	.....	5.45	+1.28	1.60	0	8	21	3	6	se.	J. V. Oldham.
Farmers	Rowan	668	10	71.2	− 0.2	92	1†	45	23†	40	4.45	+0.46	1.80	0	8	21	4	5	w.	Durwood Cassity.
Jackson	Breathitt	776	6	.....	.....	.....	.....	.....	.....	.....	4.71	......	1.00	0	9	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	3	.....	.....	.....	.....	.....	.....	.....	7.64	......	1.70	0	9	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	14	.....	.....	.....	.....	.....	.....	.....	4.70	−0.34	2.57	0	6	.....	.....	.....	.....	Miss Carrie S. Adams.
Manchester	Clay	1400	8	.....	.....	.....	.....	.....	.....	.....	4.76	......	1.93	0	8	.....	.....	.....	.....	Mrs. Geo. P. Hatton.
Maysville	Mason	524	20	71.8	− 1.1	99	17	48	8†	48	4.23	−0.10	1.90	0	8	21	1	8	e.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	28	71.9	− 0.5	97	16†	44	23	40	2.44	−2.69	1.44	0	8	21	2	7	e.	W. R. McKee.
Pikeville	Pike	634	12	.....	.....	.....	.....	.....	.....	.....	7.16	+2.85	2.08	0	9	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	24	73.1	- 0.3	97	17	47	23	33	3.08	−0.86	1.50	0	8	18	3	9	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	72.0	......	93	1	50	26	35	3.20	......	1.50	0	3	.....	.....	.....	.....	O. A. Lund.
Williamsburg	Whitley	939	20	73.2	− 0.3	98	17	49	14†	37	5.65	+1.10	2.07	0	12	10	8	12	s.	N. C. Jones.
State averages and extremes				73.6	......	104	17	37	23	48	3.63	......	2.62	0	8	16	8	6	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for June, 1918.

Stations		Day of month.																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
aver Dam‖	G		.30	.32			.28															.20	.12			.20				.60			[illegible]
andville	M	.12	.48			.03	.63	.05			.33										T	[illegible]			.06				.07		.30		2.07
lhoun	G	T	1.61			.17	T.	.11				1.04						T.			.03	.40			T	.66			[illegible]	[illegible]	.03		[illegible]
rlington‖	G		.60	.04			.40	.08														.33	T.			.27				2.30			4.02
eenville	G	.05	.45			.20	.31															.32				.23			1.09	.77	.19		3.61
nderson	O			.56			.50					T							.40			.33								1.86			3.65
pkinsville‖	C		.60	.17			.23	.12															T.		.03				2.60				3.75
arion	O	T.	1.01			1.65	.30				T.										T.	T.			T.	T.				.85	.40		4.21
ayfield‖	M		.90					.30														.35				.05				.50			2.10
vensboro‖	O			.70			.71					.08										.17	T			T.				1.45			3.11
ducah	O	.20	.52			.04	.45	.05		.03	.22											.32			.05	.03			.04	1.33	.18		3.46
nceton‖	G		1.21				1.25	.68														.50				T.			1.85		.55		6.04
sselville‖	G		1.01	.13			.01	.05														.18				.10				.34			1.82
Central Division.																																	
pha	C		.40		T.		.50															.71							T.	.25			1.86
chorage	O	T.	.44				.32														.03	.15			T.	1.83			.39		.45		3.61
rdstown‖	S		.06	.16			.03	.55														.05				1.15				.45			2.45
wling Green‖	G		T.	.78															T.			.15				.15				.28			1.36
ownsville‖	G		.07	.62				.13														.03	.09			.09				.19			1.22
rnside‖	C			.25			.27	.20	T.													.12	.08			1.75	T.			.80			3.47
rrollton‖	O		.17	.57			.05	.02				.01				T.							.03			1.18	.16		1.19	.03			3.41
verport‖	O		.55	.11			.10	.05				.09										.01				T.				2.15			3.06
monton	G		1.10				1.10														.30					.46			1.62		.64		5.22
bank‖	C			.22			.10	.15														.12	.40			.73	.64						2.36
nkfort‖	K			.37			.60	.22								T.	T.					T.	.69			1.67	.18		.08	.15			3.96
nklin	G																																......
ensburg‖	G			.44			.31	.95														.05	.15			.12							2.02
gh Bridge‖	K		.82	.18			.08	.31									.10					.12	.04			2.35	.04						4.04
ington	O	.33	.63				1.09														.04	.07			T.	.05			1.42	.53			4.16
nction City	K		.17				.30	.04								T.			.10		T.	.37				1.08			.13	T.	1.06		3.25
tchfield	G		1.07																			.21				.45			.47				2.20
xington ***	K	.20	.09			.02	.14	T.							T.	.17					T.	.21			.03	2.01			.39	T.	.35		3.61
retto	S		.40				.55	.35													.02	.03	.03			.69			.20		.30		2.57
UISVILLE***	O	T.	.67			.12	.16														.04	T.			.06	2.11			.28		.80		4.24
Do. (Cherokee Park)	O	.17	.63				.12														.06	.04				2.62			.45		.41		4.50
John	S		.80	.44			.50	.10														.07				.13				.63			2.67
tt	L		.07				.91				.22	.03			.03							.01			T.	2.40			.80		.01		4.48
elbyville	S		.05	.41			.10	.85									.05					.15	.18			1.50	.10		.08	.47			3.94
ylorsville	S	T.	.44			T.	.50	.02													.06	.34			.01	1.78			.25		.37		3.77
lliamstown ‡	L		.02	.17			.35	.21				.01				.01							T.			.77	.78		1.15	.02			3.49
odbury	G		.20	.91			.09															.22				.37				.55			2.34
Eastern Division.																																	
ttyville	K			.07			.30	.35	.05										.85			.15	.46			1.85	1.07			.20			5.35
ea	K		.02				.12	.42										.04				.12	.35			1.30			.09		.42		2.88
lettsburg‖	B			.25			.46		.05		.09												.07			1.65	.61						3.18
athiana‖	L			.14				1.50																		1.05	.25		T	.15			3.09
mouth	L		.07	.43			1.44	.40				.02											T.			1.60	.49		1.00	T.			5.45
rmers	L		.10				.43	.12											.16			.63	.34			1.80					.87		4.45
kson‖	K			.95			.05	.35	.25										.90			.15	.46			.60	1.00						4.71
ndon‖	C			.75			.30												.50			.30	.95			1.70	.60			1.29	1.25		7.64
uisa	B			.39			.16	.38	.36																	.84	2.57						4.70
nchester ‡	K						.10												.07	1.03		1.93	.72				.62			.08	.21		4.76
ysville‖	O			.10			.42	.13				.85											.32			.35	1.90			.16			4.23
ddlesboro	C																																......
unt Sterling‖	L			.11			.14	.13	.03										.13				.10			1.44	.37						2.44
eville‖	B			.64			.04	.32	.76					T.					.90			.22	1.42			.78	2.08						7.16
hmond‖	K			.20			.03	.05											T.			.03	.77			1.50	.35			.15			3.08
eksbury	B		.70																			1.50					1.00						3.20
lliamsburg‖	C			.05	.10		.05	.04	.15										.98			2.07	.72			.28	.75			.07	.39		5.65

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

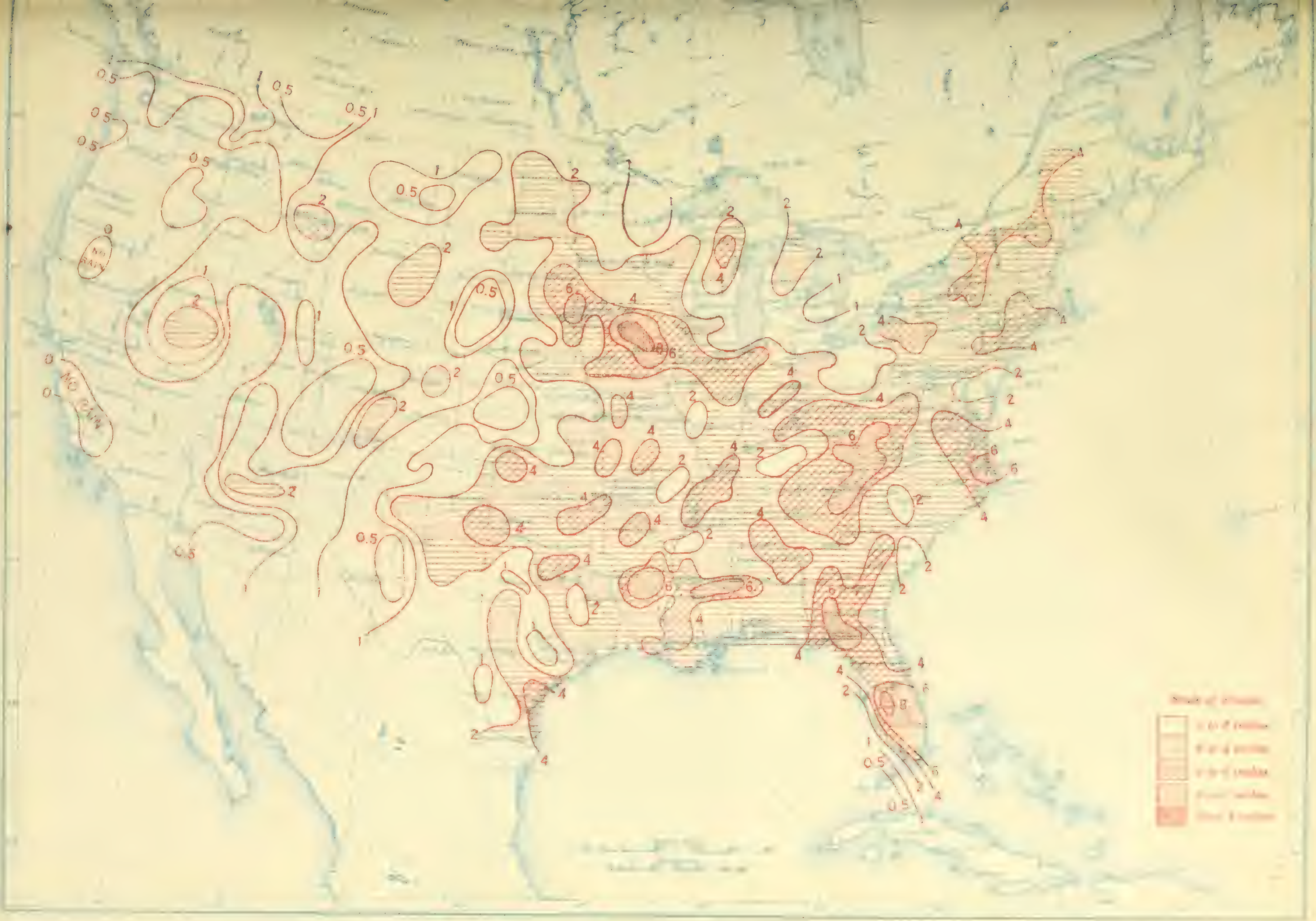
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for June, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	88	78	85	85	92	80	80	79	84	86	90	84	79	84	92	96	98	88	86	80	85	78	80	84	84	81	97	85	92	88	..	85.6
	Minimum	70	70	63	59	66	69	70	55	53	54	61	65	52	53	56	65	70	67	57	58	60	58	42	48	50	61	64	70	64	66	..	60.5
Blandville	Maximum	80	79	84	81	87	82	81	82	83	88	90	87	80	87	93	96	101	90	90	90	89	80	84	75	88	9	94	88	86	83	..	86.4
	Minimum	72	68	66	64	69	63	67	61	65	67	69	69	56	61	67	69	76	72	65	65	71	63	53	59	71	66	69	72	67	69	..	66.4
Calhoun	Maximum	88	88	86	88	87	80	82	81	88	89	91	88	82	85	96	98	101	89	86	80	88	86	81	83	84	91	94	91	90	88	..	87.6
	Minimum	72	68	64	60	67	66	67	56	52	60	64	74	50	54	66	67	75	65	63	61	65	59	46	51	70	62	65	65	63	68	..	62.8
Earlington §§	Maximum	92	84	90	92	92	83	83	84	89	92	97	89	83	91	99	102	104	92	93	90	89	80	84	87	87	93	99	95	91	88	..	90.5
	Minimum	73	69	63	59	60	67	68	59	53	54	62	67	51	52	54	65	75	69	60	63	65	58	46	50	51	62	63	65	65	66	..	61.1
Greenville	Maximum	88	82	84	89	91	82	84	..	86	90	92	92	83	88	100	100	102	94	90	84	89	90	82	87	89	90	102	101	91	91	..	a90.1
	Minimum	70	68	64	62	60	68	69	..	54	60	64	74	51	54	67	65	73	67	62	62	66	61	47	49	70	60	64	65	64	69	..	a63.1
Hopkinsville §§	Maximum	89	85	88	91	92	87	85	84	88	89	94	91	84	92	99	102	104	94	93	92	92	82	85	85	91	93	97	85	92	87	..	90.4
	Minimum	69	68	64	64	66	68	68	61	60	62	64	66	55	54	56	66	70	71	66	64	60	63	52	51	52	57	58	68	72	59	..	62.5
Marion	Maximum	84	84	86	89	88	81	83	82	84	90	91	88	83	88	99	98	103	93	92	88	90	82	84	80	88	94	96	96	90	88	..	88.7
	Minimum	78	68	62	60	67	68	67	58	59	63	67	74	50	58	66	67	75	66	60	60	66	67	48	52	65	61	64	66	65	68	..	60.5
Mayfield §§	Maximum	81	80	84	87	83	83	82	84	86	88	91	70	80	79	94	97	103	92	91	93	88	81	82	81	93	95	91	89	86	84	..	86.8
	Minimum	72	68	67	64	69	66	68	61	61	65	66	65	56	57	61	65	76	73	64	63	68	60	51	54	64	64	66	74	66	69	..	64.8
Owensboro §§	Maximum	84	81	87	88	85	79	80	82	85	86	90	85	84	90	94	97	99	89	86	78	87	80	84	83	85	91	94	86	88	83	..	86.3
	Minimum	70	70	68	62	68	65	68	57	55	62	66	74	54	56	67	69	75	67	64	65	65	62	51	54	72	65	65	69	65	66	..	64.9
Paducah (Lone Oak)	Maximum	95	87	85	89	90	86	87	84	90	90	96	95	86	90	97	98	103	100	92	90	92	89	91	93	92	97	98	93	89	85	..	91.6
	Minimum	73	68	66	65	68	66	68	60	61	66	70	76	56	60	67	68	77	72	65	65	67	64	55	58	56	66	68	70	65	69	..	65.8
Princeton §§	Maximum	85	84	86	85	90	90	79	82	91	90	96	87	84	98	98	101	99	91	91	88	91	81	85	84	87	93	100	88	93	85	..	91.4
	Minimum	68	72	66	62	63	68	69	60	60	65	67	68	55	54	64	68	75	70	64	65	65	63	50	52	53	63	64	65	66	67	..	63.7
Russellville §§	Maximum	92	80	84	88	89	82	82	84	86	88	93	87	80	92	96	100	101	90	90	89	88	79	82	88	87	89	96	85	89	88	..	88.1
	Minimum	69	68	62	62	63	66	68	58	57	59	60	64	52	52	53	64	69	64	63	62	63	63	47	48	44	62	63	66	65	68	..	60.8
Central Division.																																	
Alpha	Maximum	89	79	82	86	82	86	78	74	87	80	88	86	76	84	87	93	90	86	83	84	82	74	83	88	79	85	96	84	80	84	..	83.6
	Minimum	70	65	67	63	58	70	69	60	60	59	59	76	51	51	60	64	72	72	66	60	70	60	47	50	69	65	63	72	72	65	..	63.3
Anchorage	Maximum	89	89	84	87	88	84	80	79	85	88	91	85	80	85	87	98	99	89	87	78	87	78	82	85	76	84	91	84	86	87	..	85.7
	Minimum	64	66	61	52	65	63	67	49	48	53	59	73	47	51	63	68	69	59	58	58	57	54	37	48	61	68	61	64	63	65	..	59.0
Bardstown §§	Maximum	93	81	89	94	91	85	82	84	89	91	94	91	84	86	94	101	102	91	90	81	87	81	86	85	79	87	95	81	91	88	..	88.4
	Minimum	65	70	62	56	64	67	59	50	49	53	59	61	50	50	57	63	69	62	57	59	61	59	39	48	58	61	62	66	65	65	..	58.9
Bowling Green §§	Maximum	96	80	89	93	91	86	87	86	91	92	97	91	85	91	95	102	101	94	91	88	90	84	88	91	97	91	96	83	93	92	..	91.0
	Minimum	68	69	62	59	61	67	69	58	55	61	61	67	53	55	57	69	74	69	65	62	65	60	48	50	54	67	65	66	66	69	..	62.4
Edmonton	Maximum	94	84	83	..	84	85	84	80	85	..	92	87	79	..	94	98	98	98	89	79	..	..	80	80	83	..	94	87	..	81	..	g86.9
	Minimum	64	66	63	..	66	66	57	57	54	..	57	54	51	.	57	64	67	77	54	54	..	..	46	46	47	..	55	69	..	57	..	g58.6
Eubank §§	Maximum	90	83	81	88	88	81	80	78	84	86	88	88	78	83	88	94	98	87	85	84	79	75	80	81	80	82	87	82	87	85	..	84.3
	Minimum	65	64	62	66	63	66	67	54	53	52	56	68	49	49	55	58	67	65	63	59	64	56	42	48	63	60	58	63	63	66	..	59.5
Frankfort	Maximum	93	84	85	88	91	87	79	78	84	87	90	87	80	84	85	96	97	93	85	83	85	82	78	85	83	84	89	83	88	90	..	86.1
	Minimum	68	66	63	58	65	69	71	53	52	55	63	76	54	55	65	62	72	63	63	63	60	61	46	51	61	63	63	67	69	67	..	62.1
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	92	79	85	88	88	82	81	78	82	86	87	88	76	85	91	97	97	84	88	82	83	78	79	85	85	85	92	81	90	92	..	85.5
	Minimum	61	66	61	54	60	67	67	55	52	55	66	61	50	50	55	62	67	65	60	57	59	57	42	46	54	63	60	63	65	66	..	58.8
Irvington	Maximum	89	82	81	85	86	82	80	76	81	88	89	83	79	80	89	94	95	93	84	79	86	83	78	82	79	84	93	86	85	85	..	84.6
	Minimum	72	68	64	60	69	68	69	59	57	59	62	70	52	56	66	65	77	64	62	62	67	61	45	52	69	63	65	63	65	70	..	63.4
Junction City	Maximum	90	82	85	88	88	83	82	81	86	87	90	87	80	82	90	92	99	93	88	84	82	82	82	84	73	83	88	87	86	88	..	85.8
	Minimum	64	64	61	59	62	67	69	50	48	50	52	48	48	47	59	59	76	61	58	56	61	57	44	45	60	52	58	60	63	63	..	57.5
Leitchfield	Maximum	90	80	85	88	86	83	81	76	85	88	89	81	81	86	94	97	97	89	80	75	85	78	83	85	84	87	95	85	89	86	..	85.6
	Minimum	66	67	63	58	66	67	68	55	55	60	64	63	50	51	63	66	71	64	60	60	65	60	44	49	68	66	62	65	63	67	..	61.5
Lexington	Maximum	89	77	83	88	89	81	76	78	83	84	87	82	76	81	83	94	93	83	83	78	86	71	77	82	75	81	87	80	84	86	..	82.4
	Minimum	72	64	62	63	68	68	59	54	61	66	67	56	50	60	63	66	69	60	60	60	66	54	48	60	58	61	67	65	69	60	..	61.9
Loretto	Maximum	91	85	87	90	90	86	83	80	84	87	89	90	84	86	90	96	100	96	89	82	86	84	83	85	82	86	92	90	92	89	..	87.8
	Minimum	66	65	60	54	65	67	68	49	49	54	59	74	48	56	65	60	69	63	57	58	61	58	40	46	62	60	60	65	66	65	..	59.4
Louisville	Maximum	88	77	86	89	86	81	79	79	84	86	90	84	78	84	89	96	96	86	80	74	86	74	79	81	76	84	91	81	88	85	..	84.1
	Minimum	72	66	64	66	69	69	59	53	58	62	67	59	52	61	70	70	72	62	61	63	64	55	50	57	62	65	68	66	67	63	..	63.1
Do. (Cherokee Park)	Maximum	87	71	83	86	85	81	78	77	81	83	87	85	76	81	86	92	94	88	83	77	85	81	76	79	75	81	88	86	85	85	..	82.8
	Minimum	68	65	61	59	64	66	67	49	51	55	62	71	50	50	64	63	74	60	58	61	60	59	44	50	61	63	62	63	64	67	..	60.4
St. John §§	Maximum	93	76	82	86	85	83	81	79	85	88	92	88	79	83	96	87	98	99	86	72	80	77	81	84	84	87	94	79	88	86	..	85.3
	Minimum	47	68	63	58	65	65	68	52	51	56	61	65	47	50	62	65	61	71	63	58	63	55	40	42	61	63	61	65	64	65	..	59.2
Scott	Maximum	88	78	86	85	88	81	76	75	85	88	87	81	80	84	84	94	91	82	81	73	83	78	80	83	73	82	83	80	89	84	..	82.7
	Minimum	70	66	60	55	66	65	65	59	49	57	60	62	50	58	60	59	76	57	56	57	55	57	45	52	59	60	63	63	65	65	..	59.6
Shelbyville §§	Maximum	90	78	85	90	90	83	86	80	85	87	90	86	81	83	87	97	98	88	88	75	85	77	82	85	74	84	90	81	87	88	..	85.1
	Minimum	67	69	61	58	62	67	66	47	52	54	58	65	48	52	56	66	70	58	58	59	57	55	40	50	58	61	61	64	64	65	..	58.9
Taylorsville	Maximum	91	80	85	89	87	84	79	79	86	85	91	85	80	85	88	96	96	85	85	76	86	80	82	84	76	83	90	84	86	87	..	85.0
	Minimum	65	66	62	55	63	68	70	50	49	52	59	70	51	50	63	61	67	62	62	59	59	59	40	47	62	63	60	66	67	65	..	59.7
Williamstown §§	Maximum	91	77	86	90	88	88	78	78	85	86	88	81	79	85	86	95	95	87	84	71	85	74	81	84	71	82	87	81	89	84	..	83.9
	Minimum	71	68	63	63	64	67	67	49	64	60	61	62	49	51	66	62	68	57	57	57	59	57	42	47	57	60	61	64	64	67	..	59.9
Eastern Division.																																	
Beattyville §§	Maximum	92	83	81	90	91	87	82	84	83	87	91	89	81	86	82	97	99	85	87	84	75	76	78	84	77	84	89	83	84	90	..	85.4
	Minimum	66	63	65	55	58	61	67	52	54	52	50	59	49	49	54	53	66	63	55	53	57	56	46	56	48	60	59	60	64	64	..	57.1
Berea	Maximum	90	89	82	91	91	88	78	81	82	88	90	89	89	94	88	95	98	90	85	83	80	81	79	84	81	81	89	84	86	87	..	86.4
	Minimum	69	69	62	66	68	68	67	60	50	54	58	73	46	50	61	62	62	64	61	61	62	56	41	51	59	61	62	69	65	65	.	60.2
Farmers	Maximum	92	80	87	87	87	86	82	81	86	88	90	87	82	86	84	89	91	92	85	82	78	76	78	84	77	81	88	86	86	88	..	84.7
	Minimum	63	62	59	55	58	66	68	55	49	49	56	72	47	48	59	49	65	62	58	56	63	56	45	45	59	58	58	64	62	63	..	57.6
Maysville §§	Maximum	95	81	90	91	95	85	80	81	88	91	91	85	80	89	85	98	99	90	89	89	79	75	81	90	71	82	90	86	92	92	..	87.0
	Minimum	64	67	59	58	59	60	67	48	49	51	55	60	53	55	52	50	63	57	55	55	59	58	49	48	50	55	56	59	64	61	..	56.5
Middlesboro	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mount Sterling §§	Maximum	93	81	84	89	93	85	79	78	83	88	91	88	76	88	85	97	97	84	84	84	80	73	77	87	74	81	88	82	89	90	..	84.9
	Minimum	68	64	59	58	62	62	68	48	47	52	58	69	49	53	60	57	73	61	60	60	59	56	44	48	59	59	59	66	65	65	.	58.9
Richmond §§	Maximum	92	78	85	89	89	82	78	76	85	87	88	86	77	85	88	96	97	86	86	80	77	75	77	83	75	82	90	83	86	89	..	84.2
	Minimum	71	69	63	59	66	68	67	52	54	57	63	72	50	55	63	63	73	63	61	60	68	57	47	54	57	59	62	70	67	69	..	62.0
Weeksbury	Maximum	93	89	76	85	86	80	78	80	80	83	85	85	80	82	85	88	90	84	78	81	78	75	73	75	78	80	81	82	77	75	..	81.4
	Minimum	65	63	66	60	63	69	70	60	54	58	60	65	62	64	65	53	78	75	63	65	63	60	61	62	65	50	57	60	59	60	..	62.5
Williamsburg §§	Maximum	92	87	83	89	90	85	82	85	83	87	90	90	79	86	90	95	98	82	85	83	78	78	72	83	82	80	88	85	88	89	..	85.5
	Minimum	65	64	62	61	63	68	68	58	60	58	55	63	53	49	58	60	65	66	62	62	62	63	53	49	55	64	64	65	68	58	..	60.8

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of inches
1 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
NO RAIN
NO RAIN
0.5
1
2
4
6
8

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

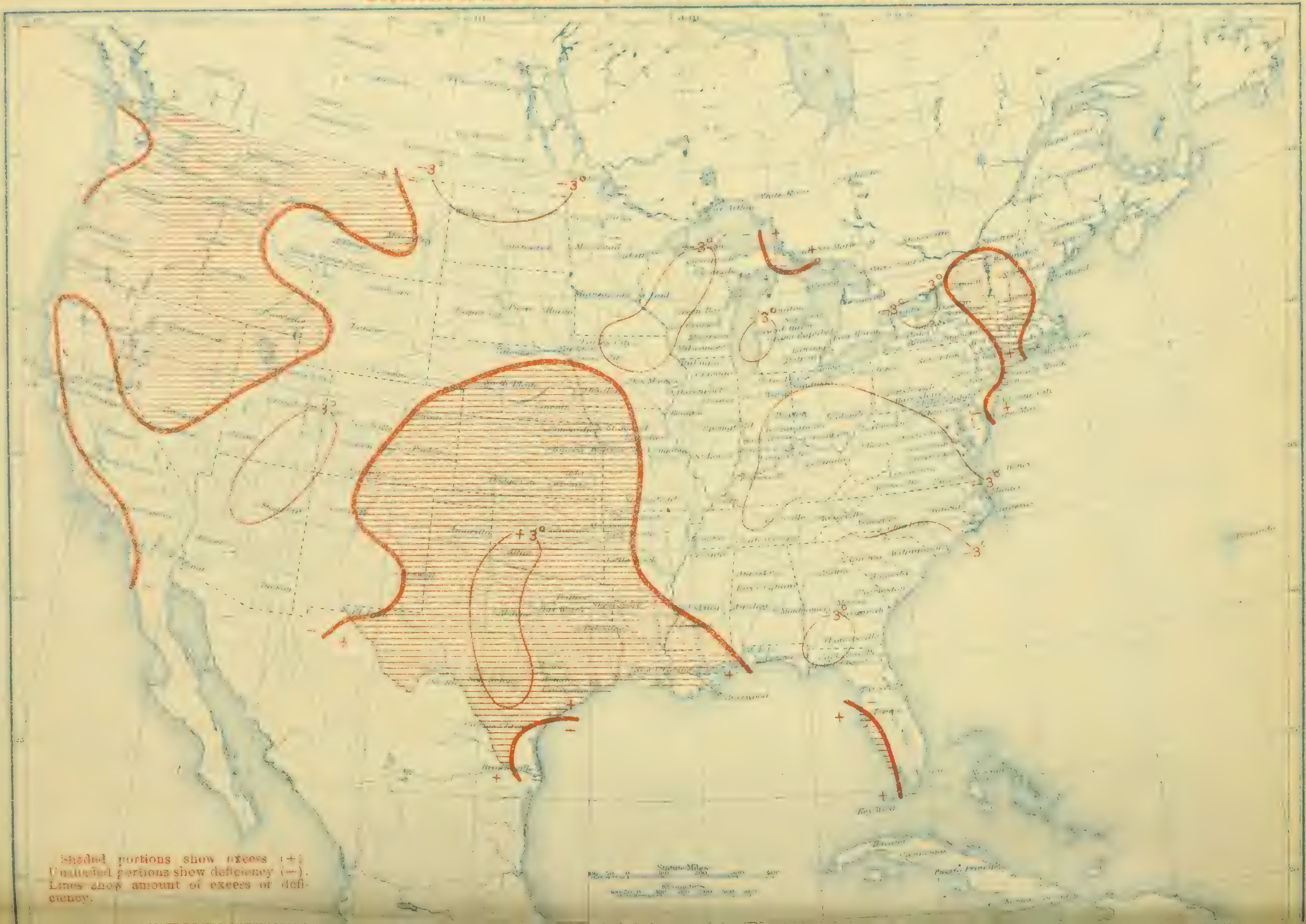
KENTUCKY SECTION

JULY, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 24, 1918

Departure of the Mean Temperature from the Normal, July, 1918



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. LOUISVILLE, KY., JULY, 1918. No. 7

GENERAL SUMMARY.

The weather during July was generally unfavorable for the roper development of corn and tobacco, being too cool and enerally too dry for best results; but was quite favorable for the ultivation of these crops, for threshing and for hay harvest. erious drought conditions persisted throughout the month in ost of the western counties, good rains occurring in only a few ocalities in that section of the State. Crops, especially corn, ere considerably damaged in that district by the drought, and he agricultural situation there was decidedly unfavorable at the nd of the month. The rainfall was fairly generous in most of he central and eastern counties, although very unevenly istributed and in many localities insufficient for the needs of he crops.

Temperatures averaged considerably below normal, this month eing the coldest July since State records were established in 889, except July, 1890. During the first two decades mini-um temperatures were in the 50's on most days. There were ractically no warm nights, a peculiar and unusual feature for uly in this State. On many days the maximum temperature egistered above 90, while the minimum at night fell below 60°, he daily range in temperature being frequently 35° to 40°. nother interesting temperature feature was the persistence of igh maximum temperatures in the western counties affected by rought, while there were relatively few days with maxima bove 90° in the central and eastern counties. Thunderstorms ere not frequent, and nearly all of them occurred in the third ecade.

PRESSURE.

Shallow areas of low pressure passed over the Ohio Valley uring the periods 7-8th and 16-17th, and a fairly deep trough n the 29th. These were the only "lows" affecting weather onditions to any extent in this section during the entire month. ligh pressure areas dominated the rest of the time.

The mean sea-level pressure, based on the records of two sta-ions, was 30.06 inches. The extremes were 30.28 inches on he 4th and 29.84 inches on the 17th, both at Lexington.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, as 73.8, which is 2.9° below normal, and only slightly warmer han June preceding. Maximum temperatures were generally ow for July in the central and eastern counties, registering elow 90° on most days except in the dry districts. Minimum emperatures below 50° occurred on several days in the central nd eastern parts of the State. The extremes were 103° at 'aducah (Lone Oak) on the 26th, and 46° at Eubank on the th.

PRECIPITATION.

The average precipitation for the State, computed from the ecords of 53 stations, was 3.28 inches, which is 1.02 inches be-ow normal for July. As a rule only light showers occurred in he western counties, the monthly amounts in that section being enerally less than one inch. Over the rest of the State the rain-all was irregularly distributed, varying between 1.5 and 8 nches, with marked differences in amounts at contiguous tations, and with several dry "spots" where the monthly mounts were less than 2 inches. Amounts at the various stations ranged between 0.43 inch at Mayfield and 8.25 inche at Cloverport. Moderate to heavy showers occurred in the central and eastern counties in the periods 7-9th, and from the 22d to 31st. Heavy rains occurred on the 27th at several stations.

WIND.

The total wind movement at Louisville was 5,909 miles, and at Lexington 6,703 miles, with average hourly velocities of 7.9 and 9.0 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 36 miles per hour from the north on the 11th, and at Lexington 31 miles from the northeast on the same date.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 71 per cent, at 12 noon 53 per cent, and at 7 p. m. 55 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 74 and at Lexington 48.

MISCELLANEOUS.

July 8.—A farmer was killed by lightning while walking in his yard near Cave City.

July 23.—There was some local damage to tobacco by hail near Lexington.

July 25.—Many head of stock were killed and several barns burned by lightning in the blue grass region. Near Hawesville three horses and near Stanford six cows were killed by lightning.

July 29.—Basements were flooded by a heavy local rainstorm at Louisville.

Rivers.—At the beginning of the month the Ohio was at good boating stage, but it continued to fall slowly, and by the end of the month had become so low in many places as to impede navigation.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with [illegible] in or more
1889	75.1	−1.6	98	50	5.62	+1.32	.
1890	73.0	−3.7	101	44	2.66	−1.64	.
1891	74.0	−2.7	91	47	4.08	−0.22	. .
1892	76.5	−0.2	100	48	3.30	−1.00	
1893	78.8	+2.1	101	50	3.48	−0.82	.
1894	76.2	−0.5	105	43	2.03	−2.27	
1895	75.2	−1.5	99	49	5.75	+1.45	9
1896	77.4	+0.7	103	47	7.44	+3.14	11
1897	77.8	+1.1	107	50	4.79	+0.49	10
1898	77.8	+1.1	102	48	4.71	+0.41	11
1899	77.3	+0.6	100	47	3.78	−0.52	9
1900	77.9	+1.2	101	50	4.91	+0.61	11
1901	81.7	+5.0	112	48	1.72	−2.58	5
1902	78.1	+1.4	107	48	1.91	−2.39	6
1903	77.5	+0.8	104	49	3.53	−0.77	8
1904	75.2	−1.5	99	46	3.40	−0.90	10
1905	75.9	−0.8	102	52	5.93	+1.63	13
1906	75.2	−1.5	100	51	6.02	+1.72	11
1907	78.1	+1.4	102	40	1.71	+0.41	9
1908	76.9	+0.2	100	50	3.94	−0.36	10
1909	74.8	−1.9	99	48	6.01	+1.71	11
1910	76.2	−0.5	96	51	8.63	+4.33	16
1911	75.8	−0.9	105	42	2.28	−2.02	7
1912	76.8	+0.1	100	53	5.50	+1.20	12
1913	79.9	+3.2	109	48	2.54	−1.76	7
1914	78.8	+2.1	109	43	3.20	−1.10	6
1915	75.7	−1.0	102	49	5.30	+1.00	11
1916	78.6	+1.9	102	52	4.17	−0.13	9
1917	75.3	−1.4	100	50	4.38	+0.08	11
1918	73.8	−2.9	103	46	3.28	−1.02	8

Climatological data for July, 1918.

				Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					
Stations	Counties.	Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	15	74.0	-3.6	98	23	50	2	40	3.23	-1.16	2.00	0	6	22	2	7	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	77.0	-0.9	95	24†	56	1†	30	0.81	-3.08	0.29	0	5	9	16	6	sw.	E. W. Horr.
Calhoun	McLean	437	14	75.0	-2.8	98	24	52	9	38	2.05	-2.54	0.75	0	8	7	18	6	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	74.0	-3.9	100	23	50	9	45	0.91	-3.19	0.32	0	7	20	3	8	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	^{a}76.0	......	99^{a}	23	50^{a}	9	37	3.16	......	1.30	0	5	18	12	1	w.	C. R. Lovell.
Henderson	Henderson	327	9	......	......	......	......	......	......	......	0.73	-3.03	0.28	0	4	....	....	....	......	W. W. Shelby.
Hopkinsville	Christian	524	21	75.8	-3.0	102	6	52	9	40	0.94	-3.09	0.33	0	4	9	18	4	ne.	W. E. Graves.
Marion	Crittenden	571	19	76.0	-1.8	99	23	47	9	42	0.95	-2.98	0.38	0	3	18	10	3	nw.	B. C. Paris.
Mayfield	Graves	364	8	76.5	-1.1	96	7†	50	9	38	0.43	-4.22	0.35	0	2	8	18	5	s.	J. N. Davis.
Owensboro	Daviess	479	21	74.8	3.2	95	6	54	2	34	2.67	-1.18	1.30	0	7	17	9	5	s.	Henry S. Berry.
Paducah	McCracken	341	18	79.4	-1.6	103	26	54	9	37	0.63	-3.41	0.33	0	2	21	9	1	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{b}76.7	......	99^{b}	23	51^{b}	3†	43^{b}	2.95	-0.46	1.25	0	4	17^{b}	0^{b}	12^{b}	s.	Ray Baker.
Russellville	Logan	590	6	75.1	......	97	5	50	2	43	1.28	-3.73	0.45	0	8	23	4	4	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	72.4	-3.8	90	5†	52	2†	31	5.33	-0.37	1.75	0	7	12	8	11	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	72.2	-3.9	93	4†	47	9	34	3.55	-0.95	1.20	0	9	19	10	2	sw.	C. E. Barret.
Bardstown	Nelson	637	21	74.0	-4.5	96	4†	49	9	38	4.65	+0.17	2.15	0	5	15	1	15	s.	Chas. M. Talbott.
Bowling Green	Warren	500	27	76.2	-2.8	99	4†	53	2†	41	3.48	-0.98	0.80	0	9	16	4	11	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......	......	......	......	......	......	......	2.00	......	0.79	0	9	....	....	....	......	James H. Young.
Burnside	Pulaski	773	25	......	......	......	......	......	......	......	2.05	-2.88	1.00	0	6	....	....	....	......	C. L. Hurt.
Carrollton	Carroll	492	18	......	......	......	......	......	......	......	5.56	+2.16	1.70	0	10	....	....	....	......	Charlie Oliver.
Cloverport	Breckenridge	375	4	......	......	......	......	......	......	......	8.25	......	3.00	0	11	....	....	....	......	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{g}74.3	-1.4	95^{g}	5	47^{g}	7	33^{g}	6.45	-1.46	2.18	0	9	12^{g}	8^{g}	4^{g}	......	P. W. Ray.
Eubank	Pulaski	1177	23	71.4	-3.3	92	5†	46	9	36	3.37	-1.26	0.80	0	10	10	11	10	......	Mrs. Katie Payne.
Frankfort	Franklin	560	25	73.6	-2.8	94	28	52	9	30	4.12	+0.01	1.10	0	8	15	8	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	......
Greensburg	Green	581	25	72.4	-4.0	97	5	47	2	41	4.71	+0.12	2.40	0	8	4	9	18	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......	......	......	......	......	......	......	4.32	-0.20	1.53	0	9	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	20	74.1	-3.3	94	26	53	9	27	1.72	-1.83	0.91	0	6	19	6	6	sw.	W. J. Piggott.
Junction City	Boyle	985	24	72.7	-2.3	94	5†	51	2†	40	5.47	+1.24	2.56	0	12	16	8	7	nw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	74.0	-2.6	97	6	50	2	28	3.57	-0.57	1.71	0	6	15	14	2	n.	John E. Stone.
Lexington	Fayette	989	30	72.6	-4.0	90	4	55	31	23	2.01	-2.43	0.80	0	10	13	9	9	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	74.0	-2.3	96	4†	48	2	40	1.57	-2.63	1.07	0	9	15	12	4	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	75.0	-3.6	95	4	56	31	27	4.02	+0.28	2.08	0	7	12	13	6	n.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	8	71.7	-4.8	89	4†	52	9	28	4.72	-0.90	1.75	0	9	16	8	7	s.	Wm. I. Hunt.
St. John	Hardin	777	21	72.9	-2.8	95	4†	50	2†	39	6.40	+2.85	3.28	0	9	21	5	5	......	Sisters of Loretto.
Scott ¶	Kenton	900	20	72.3	-4.3	94	4	49	9	31	2.50	-0.84	0.64	0	11	7	18	6	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	72.6	-4.5	96	28	48	9	34	2.66	-1.44	1.05	0	9	13	14	4	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	72.2	-4.1	93	24†	50	11	33	2.98	-1.66	0.96	0	12	15	6	10	ne.	E. D. Bourne.
Williamstown	Grant	943	15	73.0	-2.6	95	28	50	9	32	2.60	-1.46	0.55	0	11	9	9	13	......	Miss Rose Carter.
Woodbury	Butler	533	0	......	......	......	......	......	......	......	4.39	......	1.91	0	8	....	....	....	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	72.0	-3.4	94	5	50	2	39	5.99	+0.96	1.80	0	12	9	11	11	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16	71.1	-5.3	93	5	49	2†	39	3.79	-1.12	0.98	0	12	14	8	9	nw.	C. F. Rumold.
Catlettsburg‡	Boyd	534	29	......	......	......	......	......	......	......	1.65	-2.55	0.51	0	8	....	....	....	......	Forester Farley.
Cynthiana	Harrison	684	0	......	......	......	......	......	......	......	3.69	......	2.15	0	7	....	....	....	......	P. H. Kehoe.
Falmouth	Pendleton	600	29	......	......	......	......	......	......	......	2.67	-1.24	0.50	0	12	15	8	8	......	J. V. Oldham.
Farmers	Rowan	668	10	71.2	-3.7	90	21	49	2†	38	3.16	-2.14	1.16	0	7	23	4	4	w.	Durwood Cassity.
Jackson	Breathitt	776	6	......	......	......	......	......	......	......	3.49	......	1.00	0	8	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	3	......	......	......	......	......	......	......	3.51	......	0.80	0	10	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	14	......	......	......	......	......	......	......	1.50	-1.86	0.55	0	13	....	....	....	......	Miss Carrie S. Adams.
Maysville	Mason	524	20	72.8	-4.2	95	22	47	2	41	5.02	+0.48	1.78	0	13	17	4	10	nw.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1128	21	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	72.0	-3.6	93	5	49	9	35	4.70	-0.31	1.16	0	12	22	3	6	w.	W. R. McKee.
Pikeville	Pike	634	12	......	......	......	......	......	......	......	6.22	+2.47	1.46	0	10	....	....	....	......	I. M. Williams.
Richmond	Madison	926	24	73.2	-3.7	94	5	52	9	31	2.86	-1.01	0.67	0	11	17	7	7	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	O. A. Lund.
Williamsburg	Whitley	939	20	72.3	-4.5	92	5†	52	2†	34	2.50	-2.37	0.96	0	10	14	12	5	s.	N. C. Jones.
State averages and extremes				73.8	......	103	26	46	9	45	3.28	......	3.28	0	8	15	9	7	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for July, 1918.

Stations.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division.																																
Beaver Dam ‖ G								.30	.50													.10		.13			2.00	.20				3.23
Blandville M						T.		T								.16	.10	.29			T						T	.06	.20			0.81
Calhoun G					T.		.02	.15		.12						T		T						.75	.25	.06	.15		.55			2.05
Darlington ‖ G	.10							T	.08								T	T	.03			.32		.05	.03		T			.30		0.91
Greenville G								.12										.37						1.27	.10		1.30					3.16
Henderson ‖ O								.25		.05													.15							.28		0.73
Hopkinsville C								T									T.	T	.23			T.			.15		.33	T		.23		0.94
Marion O								T.								T.		T.				.23		.34					.38			0.95
Mayfield ‖ M																		.35	.08													0.43
Owensboro O	.06							1.30	.30	.02												T	.62		.07	T.	T	.30	T	T.		2.67
Paducah O								T.										.30											.33			0.63
Princeton G																		T	.30			.85			.55					1.25		2.95
Russellville ‖ G	.03								.39										.16			.08	.04	.02	.45		.11					1.28
Central Division.																																
Alpha C							T.	1.10		.23						T.		.45					.25	1.30		T.	T	1.75	.25	T.		5.33
Anchorage O							.33	1.20								T.	.05					.31	T		.13	.73	.05		.67	.08		3.55
Bardstown S	1.00							.77	.28														.45				2.15					4.65
Bowling Green G									.80										.25			.50		.15	.28		.65	.15	.15	.55		3.48
Brownsville G								.12	.79	.02							.02		.14						.07		.50	.33		.01		2.00
Burnside C	T.							.10	1.00	.10									.43				T.	T.	T.		T.		.32	T.	.10	2.05
Carrollton O								.68	.02	.43		.16					.74						1.57	.15	.03		1.70			.08		5.56
Cloverport O	.03							1.37	.28								.69					.08	.91		.73	.10	3.00	.55		.51		8.25
Edmonton G							1.00											.15				.10	.07	.37		.67	1.70		2.18	.21		6.45
Eubank C	.60							.29	.80	.05									.05	.08				.25	.60				.59	.06		3.37
Frankfort K	.83							1.10	.16			.06					T.		.56				.41				.17		T.	.83		4.12
Franklin G																																
Greensburg G	.06							.28	.53										.22				.30	.59			2.40			.33		4.71
High Bridge K	.73							.62	.43										.04						1.53	.03	.03	.35		.56		4.32
Irvington O							.06	.91														T.	T.		.07		.38		.25	.05		1.72
Junction City K							.11	1.13										.03	T.			.06	.32	.14	.05	2.56	.02	.05	.90	.10		5.47
Leitchfield G								1.71										.69				.18		T.	.04	.28	.67					3.57
Lexington *** K							.10	.70		T.	.10					T.		.12	T.			.17		.32	T.	.05		.05	.36	.04		2.01
Loretto S							.05	1.07										.02					.07			.07	.02	.22	.03	.02		1.57
LOUISVILLE*** O					T.		.36	1.09			T.					T.		T				.05	T		.24	.20			2.07	.01		4.02
Do. (Cherokee Park) O							.30	1.22								T.		.01				.07			.33	.50	.11		1.75	.43		4.72
St. John S	.12							.90	.25										.05				.03	.65	.03		3.28			1.09		6.40
Scott L							.08			.13		.34	.10			.05	.16	T				.64			.42	.14			.40	.04		2.50
Shelbyville S	.55							1.05	.30													.01	.08	.23			.18		.22	.04		2.66
Taylorsville S							.23	.96				T.				T.	.06	.09			T.	.04	T.	.55	.02	.06	.06	.87	.03	.01		2.98
Williamstown L	.28							.10	.10	.43	.13	.14					.18		T.					.55		.15	.42			.12		2.60
Woodbury ‖ G									.66										.20			.06	.03		1.91		.78	.21	.54			4.39
Eastern Division.																																
Beattyville ‖ K	.26							.32	.46			.09				T.	.08		.42	T.			.34	.41			1.80		.50	.05	1.26	5.99
Berea K							.04	.38										.89	.04			.10	.34	.57	.04	.01		.12	.16	.50		3.19
Catlettsburg ‖ B	.42							.03				.15					.13							.21		.51	.16				.04	1.65
Cynthiana ‖ L										.17	.32	.10		T.										.45	.25				.25	2.15		3.69
Falmouth ‖ L	.09							.06	T.	.44	.04	.09					.05			.09			.50	.31		.27	.35			.38		2.67
Farmers L	.05							.52				.26						.62										.55	.49	.67		3.16
Jackson ‖ K	.36							.09	.40									.11	.50									1.00	.93	.10		3.49
London ‖ C								.50	.80	.03												.10	.65	.15			.50		.30	.03	.45	3.51
Louisa B	.55							T.	.12	.06		.05					.02		.10				.06		.03	.07	.21		.01	.19	.03	1.50
Maysville ‖ O								.08		.01	T.	.43	.01				.06		.01				.01			1.18	.16		.84	1.78	.04	5.02
Middlesboro C																																
Mount Sterling ‖ L	.60							.53	.14	.26		.06							.63			.03	.06	T.	1.16		1.05		T.	.16	.02	4.70
Pikeville ‖ B	.74							.16	.42								.14		.54							.12	.60		.62	1.46	1.42	6.22
Richmond ‖ K	.16							.35	.55										.10				.25	.48	.15		.02		.67	.10	.03	2.86
Weeksbury B																																
Williamsburg C	.28							.09	.96	.07							T.		.35			.05	.15	T.	T.				.30	.10	.15	2.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

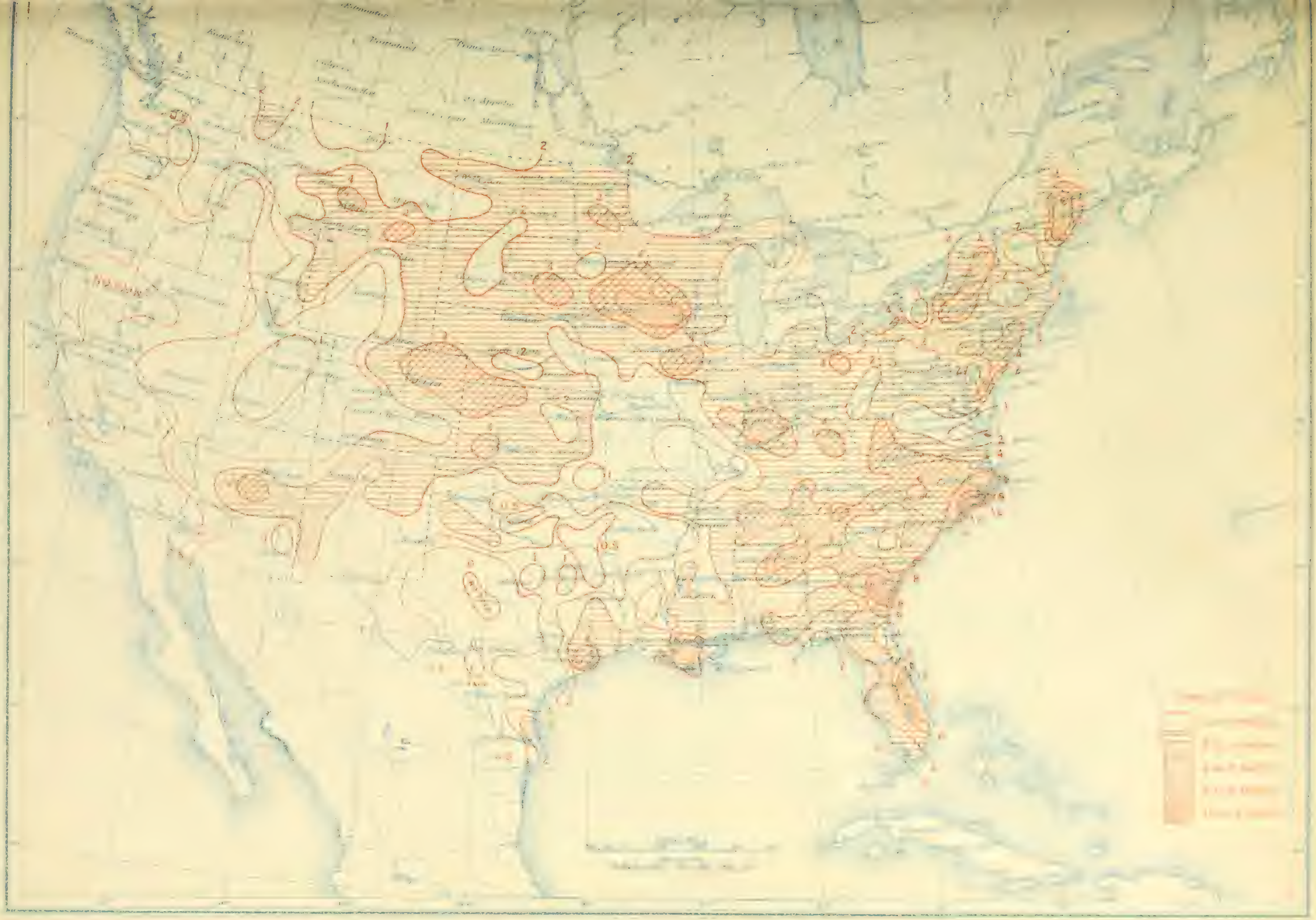
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for July, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	81	86	91	87	89	96	86	74	74	84	86	80	85	89	95	94	86	80	89	95	90	93	98	90	94	93	83	93	87	85	80	87.5
	Minimum	55	50	54	60	62	64	62	64	50	52	54	54	52	53	57	59	66	68	53	55	60	69	67	68	70	72	68	67	68	68	55	60.5
Blandville	Maximum	82	86	90	91	93	89	91	84	84	82	87	83	87	89	94	87	80	79	90	93	88	91	94	95	93	94	87	95	88	88	84	88.3
	Minimum	56	57	60	64	67	69	71	64	56	62	60	61	57	63	65	73	66	64	63	63	73	71	72	73	72	77	76	68	72	67	56	65.7
Calhoun	Maximum	80	85	87	92	95	94	93	74	83	81	86	82	85	88	92	93	89	80	89	94	90	94	97	98	95	96	85	94	86	84	81	88.5
	Minimum	54	53	58	61	64	67	64	64	52	56	55	55	54	57	60	63	63	65	57	56	67	67	69	68	67	68	67	65	68	67	53	61.4
Earlington §§	Maximum	81	87	94	99	98	96	88	75	88	85	90	85	88	93	98	97	84	79	92	97	92	95	100	98	97	95	84	98	89	87	84	87.5
	Minimum	54	52	51	60	63	66	63	66	50	52	53	55	53	55	58	52	65	66	54	55	56	68	69	72	70	70	70	65	65	66	57	60.4
Greenville	Maximum	85	87	89	97	96	93	97	81	85	85	85	79	86	88	95	96	89	82	89	93	94	93	99	93	95	96	88	94	94	84	..	^{a}90.2
	Minimum	55	54	56	60	64	67	63	65	50	57	53	57	52	55	58	64	64	66	55	56	66	67	66	67	69	70	77	65	69	66	...	^{a}61.8
Hopkinsville §§	Maximum	78	87	93	98	99	102	99	79	86	85	89	83	88	91	97	96	97	76	90	95	89	93	99	91	96	97	86	94	89	87	84	90.7
	Minimum	51	55	55	58	62	65	66	64	52	55	54	56	54	57	58	61	66	65	56	58	59	68	66	68	68	69	65	66	62	66	59	60.9
Marion	Maximum	82	87	91	94	96	96	89	83	89	86	89	84	89	92	95	96	87	80	91	96	88	94	99	93	95	95	92	96	89	85	83	90.4
	Minimum	52	51	59	61	60	65	65	64	47	54	50	55	50	52	59	66	61	66	52	54	71	68	75	71	70	80	73	70	69	66	53	61.6
Mayfield §§	Maximum	88	81	91	94	94	92	96	80	85	85	88	85	87	90	95	96	90	77	89	94	87	92	96	91	96	95	88	96	93	87	90	89.9
	Minimum	55	55	60	60	64	67	69	71	50	60	55	60	52	55	60	66	65	64	57	57	70	69	70	73	70	74	76	66	69	65	52	63.1
Owensboro §§	Maximum	89	86	87	90	93	95	74	76	80	79	82	76	80	90	89	92	92	78	88	92	85	86	93	90	89	90	84	91	81	82	80	85.8
	Minimum	58	54	59	63	65	69	66	64	56	59	57	58	59	60	64	67	67	68	61	58	65	69	68	69	71	72	70	67	68	68	57	63.7
Paducah (Lone Oak)	Maximum	84	90	95	96	94	92	93	78	87	83	91	92	90	93	99	98	95	85	93	96	95	98	102	97	99	103	100	101	93	87	86	93.1
	Minimum	59	67	62	64	64	68	69	68	54	61	68	57	55	56	62	74	65	65	60	62	70	70	72	74	75	73	76	68	72	68	60	65.7
Princeton §§	Maximum	81	87	92	95	96	98	89	75	87	84	91	..	..	92	93	98	86	79	90	96	94	96	99	96	96	94	92	96	92	83	82	^{b}90.7
	Minimum	54	53	51	59	61	64	70	67	51	52	53	60	..	..	59	65	65	66	60	53	74	75	67	70	68	72	74	65	66	68	57	^{b}62.7
Russellville §§	Maximum	79	86	94	96	97	96	95	73	81	83	86	80	86	90	95	94	86	74	93	95	89	95	96	95	95	94	83	91	89	83	81	88.7
	Minimum	51	50	51	57	61	63	65	67	52	61	53	54	53	54	56	67	67	67	57	58	68	68	60	67	68	69	69	76	67	68	58	61.5
Central Division.																																	
Alpha	Maximum	84	76	85	87	90	90	88	76	75	76	87	82	77	80	82	90	83	80	80	85	89	83	83	89	84	86	84	88	86	76	72	83.0
	Minimum	59	52	54	60	61	66	59	55	52	58	55	56	53	60	57	63	70	68	62	61	64	60	69	64	66	72	68	67	69	67	65	61.7
Anchorage	Maximum	78	81	89	93	92	90	78	75	78	79	82	74	81	86	87	88	84	77	87	90	88	85	92	92	85	92	88	93	86	81	78	84.8
	Minimum	55	53	56	66	63	65	59	58	47	55	48	53	51	57	55	60	64	62	55	59	59	68	65	65	69	70	68	65	67	63	52	59.7
Bardstown §§	Maximum	78	85	93	96	96	95	81	75	81	82	84	75	84	91	92	92	85	80	91	94	88	91	95	96	93	91	92	94	85	84	88	88.0
	Minimum	53	51	55	59	63	67	59	61	49	54	50	54	51	56	55	61	68	64	56	59	60	68	66	65	68	72	69	68	67	59	54	60.0
Bowling Green §§	Maximum	82	90	97	99	98	99	93	74	84	85	88	82	88	92	95	94	85	76	91	97	96	90	97	96	96	91	85	95	89	85	85	90.1
	Minimum	56	53	56	58	61	68	65	65	63	53	56	57	55	58	61	61	67	68	60	60	61	68	66	67	69	70	69	68	68	68	58	62.4
Edmonton	Maximum	..	..	..	91	95	93	79	..	..	84	83	..	79	83	91	84	85	79	88	91	84	91	94	92	..	89	87	90	85	89	79	^{g}87.0
	Minimum	..	..	..	65	62	65	47	..	..	52	53	...	57	59	60	62	67	67	57	61	62	62	63	67	..	67	66	68	66	66	58	^{g}61.6
Eubank §§	Maximum	76	78	87	91	92	90	84	67	78	79	81	73	79	79	87	90	83	76	85	87	87	87	85	92	90	89	88	85	85	74	78	83.3
	Minimum	52	50	51	57	61	64	67	61	46	52	49	54	60	56	53	57	69	63	56	58	60	68	65	63	66	67	67	68	63	64	57	59.5
Frankfort	Maximum	83	79	88	91	92	88	87	74	77	77	81	72	80	85	87	87	84	81	86	89	87	88	89	92	88	90	89	94	84	79	77	84.7
	Minimum	58	53	58	62	64	68	63	59	52	61	53	57	54	59	56	66	68	65	60	63	60	69	67	69	71	71	70	68	69	67	57	62.5
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg §§	Maximum	81	83	92	92	97	94	92	70	78	81	84	77	83	87	90	93	84	75	87	91	89	89	92	91	85	86	85	89	83	81	77	85.7
	Minimum	51	47	51	56	60	64	56	62	48	53	52	53	49	55	56	60	65	65	57	59	62	66	66	64	65	70	66	67	66	66	56	59.1
Irvington	Maximum	75	81	87	91	92	89	86	71	75	78	81	77	81	85	87	88	84	79	85	90	86	86	93	92	88	94	85	91	88	81	78	84.6
	Minimum	60	54	60	67	65	63	65	61	53	57	55	57	55	60	60	72	69	67	59	60	62	72	70	68	72	74	70	69	72	68	56	63.6
Junction City	Maximum	83	80	91	92	94	92	90	71	79	80	82	81	83	86	90	91	82	81	88	90	88	88	85	94	91	89	89	90	83	80	78	85.8
	Minimum	56	51	51	56	59	68	55	58	52	55	56	56	50	56	52	60	70	63	60	60	59	66	59	64	67	69	68	64	66	67	54	59.6
Leitchfield	Maximum	80	85	92	96	95	97	85	71	79	80	82	75	82	87	92	91	87	78	87	92	86	89	92	92	90	91	85	91	86	83	79	86.4
	Minimum	55	50	54	59	63	68	64	61	54	56	54	55	54	58	60	65	66	66	60	60	64	68	66	66	69	70	68	66	67	68	55	61.6
Lexington	Maximum	72	77	85	90	89	87	80	70	74	75	78	69	78	82	86	84	79	80	84	87	85	84	83	89	86	82	88	90	80	75	74	81.4
	Minimum	57	57	62	73	71	66	62	56	55	57	57	56	59	64	68	70	66	65	61	66	70	72	68	66	68	70	67	70	67	61	55	63.9
Loretto	Maximum	84	83	92	96	96	95	92	75	81	81	85	82	85	89	91	92	89	82	90	95	91	90	94	95	91	90	90	92	85	86	84	88.5
	Minimum	54	48	54	56	60	65	57	59	52	55	50	53	49	55	53	65	69	63	57	57	59	68	65	66	70	70	67	65	66	67	52	59.5
Louisville	Maximum	76	80	88	95	92	91	72	75	79	78	80	73	82	86	88	88	83	75	88	91	86	84	93	93	86	91	88	93	85	78	78	84.4
	Minimum	59	59	63	68	71	68	61	60	58	60	60	57	60	66	64	72	70	68	64	66	69	72	73	71	72	71	70	74	68	61	56	65.5
Do (Cherokee Park)	Maximum	76	77	84	89	89	85	82	71	75	76	78	75	79	82	85	85	82	75	83	86	84	83	89	88	84	89	85	88	82	77	74	81.8
	Minimum	57	54	59	61	64	67	60	57	52	55	53	55	55	60	58	65	68	64	58	60	62	69	68	68	70	68	69	69	68	63	53	61.6
St John §§	Maximum	78	82	92	95	95	93	84	70	73	80	82	75	80	86	89	89	82	76	89	91	84	91	95	91	85	90	86	90	89	82	77	85.2
	Minimum	53	50	54	58	62	68	58	62	50	55	51	53	52	57	60	67	67	65	56	60	62	68	65	65	70	70	66	68	66	67	54	60.6
Scott	Maximum	75	77	86	94	91	89	79	75	79	79	82	73	80	85	87	80	82	80	84	89	88	91	90	93	83	88	90	92	78	73	78	83.5
	Minimum	56	50	61	63	65	63	62	56	49	55	52	52	55	59	56	66	64	65	61	62	57	70	67	66	69	71	69	69	66	63	55	61.1
Shelbyville §§	Maximum	77	80	87	92	92	90	75	75	78	80	83	74	84	87	89	87	83	77	89	90	88	92	90	93	93	92	92	96	85	82	80	85.5
	Minimum	54	52	58	60	65	65	61	58	48	53	49	53	51	56	55	58	68	62	57	59	60	64	66	65	67	70	68	67	66	64	51	59.7
Taylorsville	Maximum	75	82	88	92	92	90	76	74	78	78	82	73	81	85	85	90	82	78	86	88	85	87	92	93	86	87	86	93	83	80	78	84.0
	Minimum	57	51	55	59	61	66	58	59	49	56	50	56	51	57	53	65	67	63	57	58	58	67	65	66	70	71	70	66	67	67	55	60.3
Williamstown §§	Maximum	74	77	87	93	91	89	73	77	79	80	83	72	82	88	89	82	84	79	87	92	89	89	87	93	90	89	93	95	78	79	83	84.6
	Minimum	57	53	55	65	67	64	64	64	50	52	52	51	55	59	62	64	65	65	59	64	64	65	68	63	66	70	68	69	68	64	52	61.4
Eastern Division.																																	
Beattyville §§	Maximum	78	81	90	93	94	91	83	73	80	81	85	75	83	86	90	90	83	78	85	88	89	90	86	90	96	80	91	93	87	74	80	85.1
	Minimum	53	50	52	54	62	65	60	59	51	53	53	54	52	53	52	56	62	63	62	61	59	60	62	63	63	65	66	66	65	68	61	58.9
Berea	Maximum	84	82	91	91	93	92	87	85	79	80	83	83	80	85	86	90	80	81	85	90	85	85	84	92	89	85	89	90	85	75	76	85.2
	Minimum	64	49	54	61	63	63	61	58	49	55	50	51	50	52	52	57	60	53	59	51	58	50	56	56	58	62	57	65	65	65	64	57.0
Farmers	Maximum	78	78	88	84	88	89	87	74	78	85	85	80	82	87	88	88	83	82	88	89	90	88	89	87	87	86	89	85	81	78	81	84.6
	Minimum	52	49	51	58	63	64	58	56	49	54	49	55	52	55	50	56	63	60	62	59	57	67	64	64	62	67	65	55	63	67	56	57.8
Maysville §§	Maximum	78	80	90	92	94	91	76	79	81	82	84	74	84	88	90	87	87	84	90	93	94	95	92	92	84	92	90	92	83	75	82	86.3
	Minimum	54	47	49	59	64	65	60	57	57	49	49	52	55	57	55	57	63	62	59	60	57	60	61	68	66	68	67	67	66	67	57	59.2
Middlesboro	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mount Sterling §§	Maximum	74	77	88	90	93	89	86	72	76	78	81	72	79	84	88	91	82	79	86	87	91	91	88	92	87	90	90	90	81	72	77	83.9
	Minimum	53	50	53	60	64	67	60	57	49	55	51	55	53	57	53	61	67	60	58	60	61	70	67	66	66	69	66	66	65	67	57	60.1
Richmond §§	Maximum	76	81	88	91	94	91	79	71	77	79	82	75	82	87	86	87	80	79	87	91	86	86	81	92	87	85	91	91	85	77	80	84.0
	Minimum	56	54	57	63	66	68	61	59	52	59	54	58	53	60	60	67	69	65	60	64	65	69	69	65	68	71	67	68	66	66	56	62.4
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg §§	Maximum	78	79	88	90	92	91	89	67	78	80	82	75	82	85	87	92	87	75	85	90	87	87	90	92	92	82	89	91	84	75	80	84.5
	Minimum	60	52	53	54	57	66	59	60	55	52	55	54	52	53	55	58	66	66	62	62	63	64	67	63	66	68	64	63	65	66	63	60.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record



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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

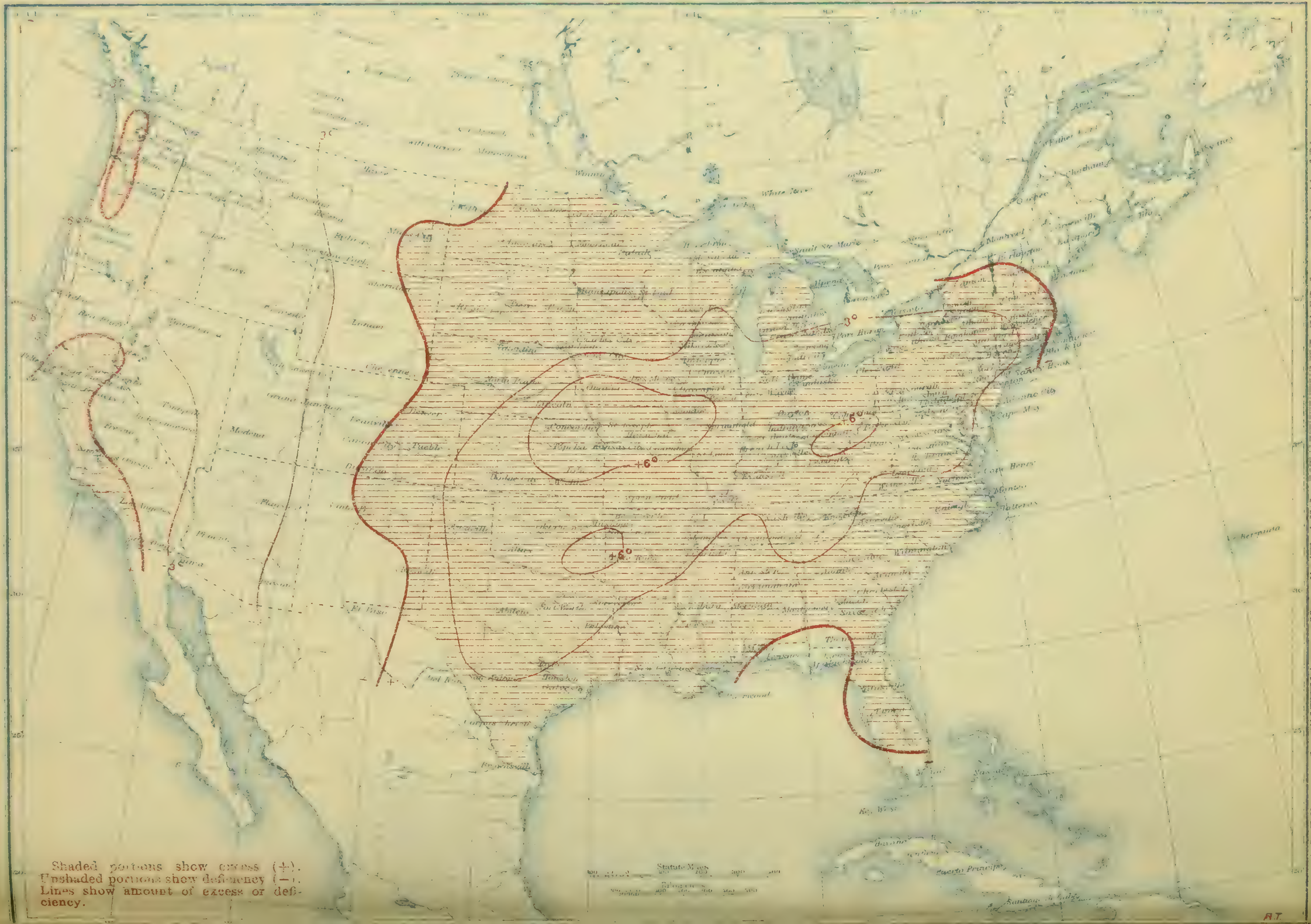
KENTUCKY SECTION

AUGUST, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 24, 1918

Departure of the Mean Temperature from the Normal, August, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., August, 1918. No. 8

GENERAL SUMMARY.

Weather conditions during August were characterized by extreme heat of long duration and drought that caused great damage to crops. It is probable that the disastrous effect of the weather on the crops in this State was greater than in any August since 1881, to which year it is necessary to go for similar conditions. Maximum temperatures reached 111° at two stations in the western counties, which breaks all records except those of the memorable heat wave in July, 1901. During the first three weeks maximum temperatures of 100° and higher were registered at several stations in the western counties on ten to fifteen days, while the maximum temperature was seldom below 90° at any station in the State.

With the exception of a few local showers, no rain of consequence occurred until the 25th, when general rains set in and continued for several days, effectually ending the drought in all except a few localities. The long drought—which began in the western counties in July—and the intense heat caused great damage to early corn, reducing the prospective yield at least one-half in many localities. Early tobacco was badly damaged and had to be cut in order to save it. Gardens were generally burned up, while grasshoppers became a pest and caused considerable damage. The rains of the last week came too late for the early crops, but they were of great benefit to late corn, tobacco, and potatoes, and also put the soil in condition for fall plowing.

PRESSURE.

High pressure areas prevailed during the greater portion of the month. From the 4th to 14th and 21st-23d the dominating "highs" were crested to the south or southeast, while from the 15th to 20th, and on the 27th, they were crested to the north or northeast. Troughs of low pressure passing eastward influenced the weather over this section, giving much needed rains, in the periods 24-26th and 28th-31st.

The mean sea-level pressure, computed from the records of two stations, was 30.04 inches. The extremes were 30.31 inches at Lexington on the 20th and 29.83 inches at Louisville on the 4th.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 80.2, which is 4.5° above normal, and the highest on record for any month since State averages were established, except for August, 1900, 80.4°, and July, 1901, 81.7°. At Earlington, Greenville, and Hopkinsville maximum temperatures of 100° or higher were registered on fifteen days and at Lone Oak (near Paducah) on sixteen days. The extremes were 111° at Earlington and Greenville on the 11th, and 50° at Irvington, Loretto, and Marion on the 1st.

PRECIPITATION.

The average precipitation for the State, determined from the reports of 52 stations, was 3.18 inches, which is 0.38 inch less than normal. Only during one period, 25th-31st, were rains general over the State; and most of the month's rainfall occurred in this period. There were scattered showers, due to local thunderstorms, during the first three weeks; but on account of the intense heat they were of little benefit. The distribution of rainfall over the State was very irregular. In many localities aggregate amounts were less than two inches, particularly in Christian, Todd, and Logan counties, and over the headwaters of the Salt, Kentucky, and Cumberland rivers. Over a few limited areas, generally in the northern counties, aggregates exceeded four inches. Total amounts at the various stations ranged between 7.18 inches at Calhoun and 1.24 inches at Blandville. Thunderstorms were frequent, and damaging in a few instances.

WIND.

The total wind movement at Louisville was 6,906 miles, and at Lexington 7,830 miles, with average hourly velocities of 9.3 and 10.5 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 48 miles per hour from the southeast on the 6th, and at Lexington 72 miles from the south on the same date.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 72 per cent, at 12 noon 50 per cent, and at 7 p. m. 57 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 80 and at Lexington 55.

MISCELLANEOUS.

August 5.—There were several prostrations from heat at Louisville.

August 7.—One death and two prostrations at Louisville were attributed to the heat.

August 14.—Six valuable cows were killed by lightning near Stanford, Ky. Lightning started a fire at Camp Zachary Taylor that resulted in a loss of about $48,000.

August 10.—Two deaths and three prostrations at Louisville were attributed to heat.

Rivers.—All stages were low during the month, and were influenced but little by the rains of the last week.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with 0.01 in. or more.
1889	70.6	−5.1	100	43	1.23	−2.33	
1890	73.2	−2.5	101	44	6.16	+2.60	
1891	72.9	−2.8	105	43	5.82	+2.26	
1892	75.4	−0.3	96	45	3.13	−0.43	
1893	74.8	−0.9	99	48	1.72	−1.84	
1894	77.1	+1.4	105	41	3.02	−0.54	
1895	76.6	+0.9	102	49	2.15	−1.41	6
1896	77.1	+1.4	105	41	2.83	−0.73	5
1897	75.2	−0.5	101	49	2.33	−1.23	6
1898	76.7	+1.0	100	55	3.83	+0.27	7
1899	78.1	+2.4	102	51	3.09	−0.47	6
1900	80.4	+4.7	104	52	2.74	−0.82	6
1901	75.5	−0.2	101	50	5.12	+1.56	12
1902	75.6	−0.1	103	45	2.48	−1.08	7
1903	75.5	−0.2	100	49	3.27	−0.29	8
1904	75.2	−0.5	100	45	2.64	−0.92	8
1905	75.7	0.0	99	42	3.82	+0.26	9
1906	77.4	+1.7	99	45	4.37	+0.81	10
1907	74.8	−0.9	99	48	4.27	+0.71	10
1908	76.3	+0.6	104	49	2.79	−0.77	6
1909	76.9	+1.2	104	45	2.60	−0.96	7
1910	74.0	−1.7	100	46	2.72	−0.84	6
1911	76.2	+0.5	106	45	4.03	+0.47	10
1912	73.7	−2.0	98	43	4.71	+1.15	13
1913	78.0	+2.3	108	44	2.81	−0.75	7
1914	76.0	+0.3	100	49	5.94	+2.38	12
1915	71.3	−4.4	100	42	6.29	+2.73	14
1916	77.0	+1.3	101	47	4.25	+0.69	9
1917	73.9	−1.8	100	42	3.49	−0.07	8
1918	80.2	−4.5	111	50	3.18	−0.38	

Climatological data for August, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	411	15	80.6	+ 4.4	104	11	51	22	44	3.16	−0.18	0.86	0	6	22	4	5	s.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	81.0	+ 4.2	103	11	57	1	32	1.24	−1.90	0.89	0	6	10	15	6	sw.	E. W. Horr.
Calhoun	McLean	437	14	^{b}82.1	+ 4.6	105^{b}	10	55^{b}	3	40^{b}	7.18	+3.82	6.08	0	5	7^{b}	18^{b}	4^{b}	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	82.7	+ 6.1	111	11	53	1†	44	2.27	−1.05	1.06	0	8	25	1	5	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	82.6	......	111	11	54	1	43	2.60	......	1.62	0	4	17	12	2	s.	C. R. Lovell.
Henderson	Henderson	327	9	......	......	......	......	......	......	......	3.35	+1.05	1.62	0	5	....	....	....	......	W. W. Shelby.
Hopkinsville	Christian	524	21	82.6	+ 4.8	107	10†	54	1†	45	1.42	−1.63	0.60	0	4	4	26	1	sw.	W. E. Graves.
Marion	Crittenden	571	19	82.2	+ 4.1	108	11	50	1	39	4.89	+2.10	2.20	0	5	18	9	4	sw.	B. C. Paris.
Mayfield	Graves	364	8	^{a}81.2	+ 3.9	106a	11	54^{a}	2	41^{a}	3.55	+0.31	2.00	0	5	5	21	5	sw.	J. N. Davis.
Owensboro	Daviess	479	21	80.2	+ 3.8	101	10	54	1	34	1.72	−1.87	0.81	0	4	19	10	2	s.	Henry S. Berry.
Paducah	McCracken	341	18	83.8	+ 3.1	107	13	56	1	36	3.51	+0.26	1.80	0	7	23	4	4	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	82.0	......	108	11	54	1	39	6.08	+2.55	1.80	0	7	19	0	12	s.	Ray Baker.
Russellville	Logan	590	6	81.8	+ 3.7	105	11	54	1†	42	1.37	−1.16	0.81	0	6	25	3	3	s.	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	77.3	+ 1.2	95	6	55	1	32	4.10	−0.23	0.90	0	6	20	7	4	s.	W. W. Hicks.
Anchorage	Jefferson	700	17	79.3	+ 4.7	102	5	51	1	44	5.17	+1.59	1.62	0	11	17	11	3	sw.	C. E. Barret.
Bardstown	Nelson	637	21	81.0	+ 3.8	106	6	52	1	43	2.44	−1.17	1.05	0	4	17	4	10	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	81.9	+ 3.0	106	10	56	1	43	2.95	−0.57	0.90	0	7	16	12	3	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......	......	......	......	......	......	......	2.07	......	0.64	0	10	....	....	....	......	James H. Young.
Burnside	Pulaski	773	25	......	......	......	......	......	......	......	2.57	−1.54	1.03	0	7	....	....	....	......	C. L. Hurt.
Carrollton	Carroll	492	18	......	......	......	......	......	......	......	4.41	+1.59	1.29	0	10	....	....	....	......	Charlie Oliver.
Cloverport	Breckenridge	375	4	......	......	......	......	......	......	......	3.31	......	1.74	0	7	....	....	....	......	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{m}78.0	+ 3.1	100^{m}	11	57^{m}	31	32	2.55	−0.84	0.94	0	7	9^{m}	7^{m}	2^{m}	......	P. W. Ray.
Eubank	Pulaski	1177	23	77.8	+ 4.0	102	6	51	1	43	1.26	−2.69	0.70	0	4	13	13	5	......	Mrs. Katie Payne.
Frankfort	Franklin	560	25	80.2	+ 5.5	101	5	55	1	34	2.48	−1.20	0.89	0	8	15	8	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	......
Greensburg	Green	581	25	78.4	+ 2.8	97	6†	55	2	37	2.28	−1.62	0.91	0	9	6	11	14	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......	......	......	......	......	......	......	2.39	−1.48	0.57	0	9	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	20	81.0	+ 5.0	100	5	50	1	35	3.06	−0.54	1.90	0	5	19	9	3	sw.	W. J. Piggott.
Junction City	Boyle	985	24	79.0	+ 4.7	101	6	55	1†	42	1.55	−1.58	0.78	0	8	19	10	2	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	79.9	+ 4.5	103	11	54	1	38	4.02	−0.35	1.54	0	8	17	12	2	sw.	John E. Stone.
Lexington	Fayette	989	30	79.4	+ 4.8	100	6	63	20	29	2.68	−0.89	0.89	0	9	14	13	4	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	81.4	+ 6.2	105	6	50	1	39	1.51	−2.15	1.17	0	11	....	....	....	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	81.4	+ 4.9	105	5	61	1	30	3.25	−0.26	1.63	0	9	18	10	3	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	77.8	+ 2.5	97	5	55	1	32	4.55	+0.40	1.06	0	9	14	13	4	s.	Wm. I. Hunt.
St. John	Hardin	777	21	78.7	+ 4.0	102	5	54	1	40	3.58	−0.05	1.15	0	8	23	4	4	......	Sisters of Loretto.
Scott ¶	Kenton	900	20	79.2	+ 4.1	102	5†	55	1	34	3.66	+0.12	1.25	0	11	13	12	6	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	80.2	+ 4.7	106	6	51	1	43	3.80	+0.44	1.15	0	8	15	12	4	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	78.9	+ 4.5	103	5	52	1	40	4.08	+0.36	1.23	0	9	14	12	5	s.	E. D. Bourne.
Williamstown	Grant	943	15	80.3	+ 6.5	105	6	56	1	32	3.15	−0.99	1.27	0	10	5	13	13	......	Miss Rose Carter.
Woodbury	Butler	533	0	......	......	......	......	......	......	......	4.02	......	1.43	0	8	....	....	....	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	79.6	+ 4.7	102a	6	57	1†	43†	2.12	−2.51	1.12	0	9	19	8	4	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	H. E. Way.
Catlettsburg‡	Boyd	534	29	......	......	......	......	......	......	......	1.63	−1.98	0.45	0	8	....	....	....	......	Forester Farley.
Cynthiana	Harrison	684	0	......	......	......	......	......	......	......	4.90	......	2.20	0	5	....	....	....	......	P. H. Kehoe.
Falmouth	Pendleton	600	29	......	......	......	......	......	......	......	3.33	−0.20	0.60	0	10	....	....	....	......	J. V. Oldham.
Farmers	Rowan	668	10	77.8	+ 4.0	101	6	52	1	38	2.88	−1.94	1.27	0	7	24	4	3	w.	Durwood Cassity.
Jackson	Breathitt	776	6	......	......	......	......	......	......	......	1.30	......	0.70	0	3	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	3	......	......	......	......	......	......	......	5.12	......	2.60	0	10	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	14	......	......	......	......	......	......	......	3.15	−0.50	1.13	0	9	....	....	....	......	Miss Carrie S. Adams.
Maysville	Mason	524	20	79.2	+ 3.5	104	6	57	1	41	3.27	−0.71	1.04	0	11	19	3	9	sw.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	78.6	+ 4.7	100	6	53	1	36	2.62	−1.32	0.79	0	7	24	2	5	w.	W. R. McKee.
Pikeville	Pike	634	12	......	......	......	......	......	......	......	2.72	−0.80	1.52	0	6	....	....	....	......	I. M. Williams.
Richmond	Madison	926	24	80.4	+ 4.8	103	6	57	1	33	3.63	+0.43	1.20	0	7	23	5	3	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	O. A. Lund.
Williamsburg	Whitley	939	20	77.9	+ 1.8	100	6	56	25	40	5.20	+0.68	1.40	0	11	21	6	4	s.	N. C. Jones.
State averages and extremes				80.2	......	111	11	50	1	45	3.18	......	6.08	0	7	17	9	5	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, , c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for August, 1918.

Stations.	Day of month.																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																
Beaver Dam ‖ G																		.50	.10						.18	.72	.86	.80				3.16
Blandville M								.05	.05					T.							T.			T	.08	.89		.04		T	.13	1.24
Calhoun G				T				.02											T						.63	6.08	.13	T			.32	7.18
Earlington ‖ G					T				.04								.03		.08	.01						[illegible]	[illegible]	.18	T		[illegible]	2.27
Greenville G																				.05					.25	[illegible]	.65					[illegible]
Henderson ‖ O																			.25							1.62	[illegible]	[illegible]			[illegible]	[illegible]
Hopkinsville ‖ C							T.												.38	.34						T	.60	.10	T			1.42
Marion O								T.								T.	.37	T	1.35						.35	2.20	.62			T.		4.89
Mayfield ‖ M																.02			.08							2.00	.95	.50				3.55
Owensboro ‖ O					T.									T			.13	T.			T.				T	.68	.81	.10			T	1.72
Paducah O										.44				.30						.02					.32	1.80		.12			.51	3.51
Princeton ‖ G															T			.25	1.45	1.42						1.10	1.80	.04			.02	6.08
Russellville ‖ G															.05	.02			.21								.12	.16			.81	1.37
Central Division.																																
Alpha C						.90					T.				T		T.	.75	.10							90	.55	T	T		.90	4.10
Anchorage O										T.		.18		.33	.28		.20								.23	1.07	1.62	.06	.26	.38	.56	5.17
Bardstown ‖ S							.09																			1.05	.75	.55				2.44
Bowling Green G																.70			.17	.18							.17	.43	.90	T.	.40	2.95
Brownsville ‖ G																.64	.06	.24	.05	.02							.24	.45	.03	.02	.32	2.07
Burnside ‖ C							.22									T		1.03	.15								.36	.21	.10		.50	2.57
Carrollton ‖ O												.02	.15		.01				.10							1.27	.43	1.29	.11	.02	.98	4.41
Cloverport ‖ O					T.					.02	T.				.12		T.				T					.68	.56	1.74	.07		.12	3.31
Edmonton G				T.													.50		.85						.07		.08	.08	.03		.94	2.55
Eubank ‖ C							.15																				.70	.14			.27	1.26
Frankfort ‖ K							.10								.22	.08										.46	.38	.89	.05		.30	2.48
Franklin G																																
Greensburg ‖ G							.03	.05	.18							.91			.57	.13							.05	.13			.18	2.23
High Bridge ‖ K				.05			.43	.03							.48			.25									.20	.15		.23	.57	2.39
Irvington O										T.					T	T.									.05	1.90	.46	.59	T.	T.	.66	3.66
Junction City K			.01				.10								.78	.07											.17	.09	.15		.18	1.55
Leitchfield G														.29	.21				.06						.50	1.18	1.54	.15	T		.09	4.02
Lexington *** K						.34		T.	.08	T.	T.	T.		.61												.33	.88	.01	.01	.37	.05	2.68
Loretto S							.10								1.17	.04		.01							.01	.07	.05	.01	.02	.02	.01	1.51
LOUISVILLE*** O				T.			.02			T.		.01		.14	T.		.21	T.							.48	1.15	.54	.19	T	.51		3.25
Do. (Cherokee Park) O				T.			T.	T.		T.	T.			T.	1.05		.07	T.							.65	1.06	.45	.40	.03	.17	.67	4.55
St. John S												.08				.20		1.15	.16							.84	1.06	.07	T	T.	.02	3.58
Scott L							.02			.01	T.			.07			.01	.02							.30	.50	.43	1.01		1.25	.04	3.66
Shelbyville ‖ S							.35								.40			.07								.53	.90	1.15		.10	.30	3.80
Taylorsville S			T.	T.			.50	T		T		T.			.15		T.								.07	1.23	.90	.84	.05	.27	.07	4.08
Williamstown ‖ L							.06			.05		T.			.55			.03								.25	21	1.27	.06	.07	.60	3.15
Woodbury G																.14			.86	.39						.13	.65	1.43	.20		.22	4.02
Eastern Division.																																
Beattyville ‖ K					.03		.14			.33	.08				.03												.10	.26		.03	1.12	2.12
Berea K																																
Catlettsburg ‖ B										.06	.13				.16			.32	.16								.03	.45			.32	1.63
Cynthiana ‖ L							.25				T.							T.								T.	.65	.20	2.20		1.60	4.90
Falmouth ‖ L							.04			.07		.60			.01			.40								.45	.16	1.17	.03	T.	.40	3.33
Farmers L							.34			.10						.40		1.27									.14	.31			.32	2.88
Jackson ‖ K								T.																			.70	.40		T	.20	1.30
London ‖ C							1.30	.10	.15	.30	.10				.06			.05									2.60	.25			.21	5.12
Louisa ‖ B										.38	.14		.13		.10			1.13	.43								T	.52		.12	.20	3.15
Maysville ‖ O										.09	.08	T			.29			.19	.01							.73	.03	.72	.08	.01	1.04	3.27
Middlesboro C																																
Mount Sterling ‖ L																																
Pikeville ‖ B					.05						.06				.24				.39								.14	.79		T.	.95	2.62
Richmond ‖ K								.16		.18					.28												1.52	.16			.42	2.72
Weeksbury B							.35	.03		T.					1.45												.30	1.20		.20	.10	3.63
Williamsburg ‖ C							.67		21	.05						.10		.08	.24	.65							1.17	.13		1.40	.50	5.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

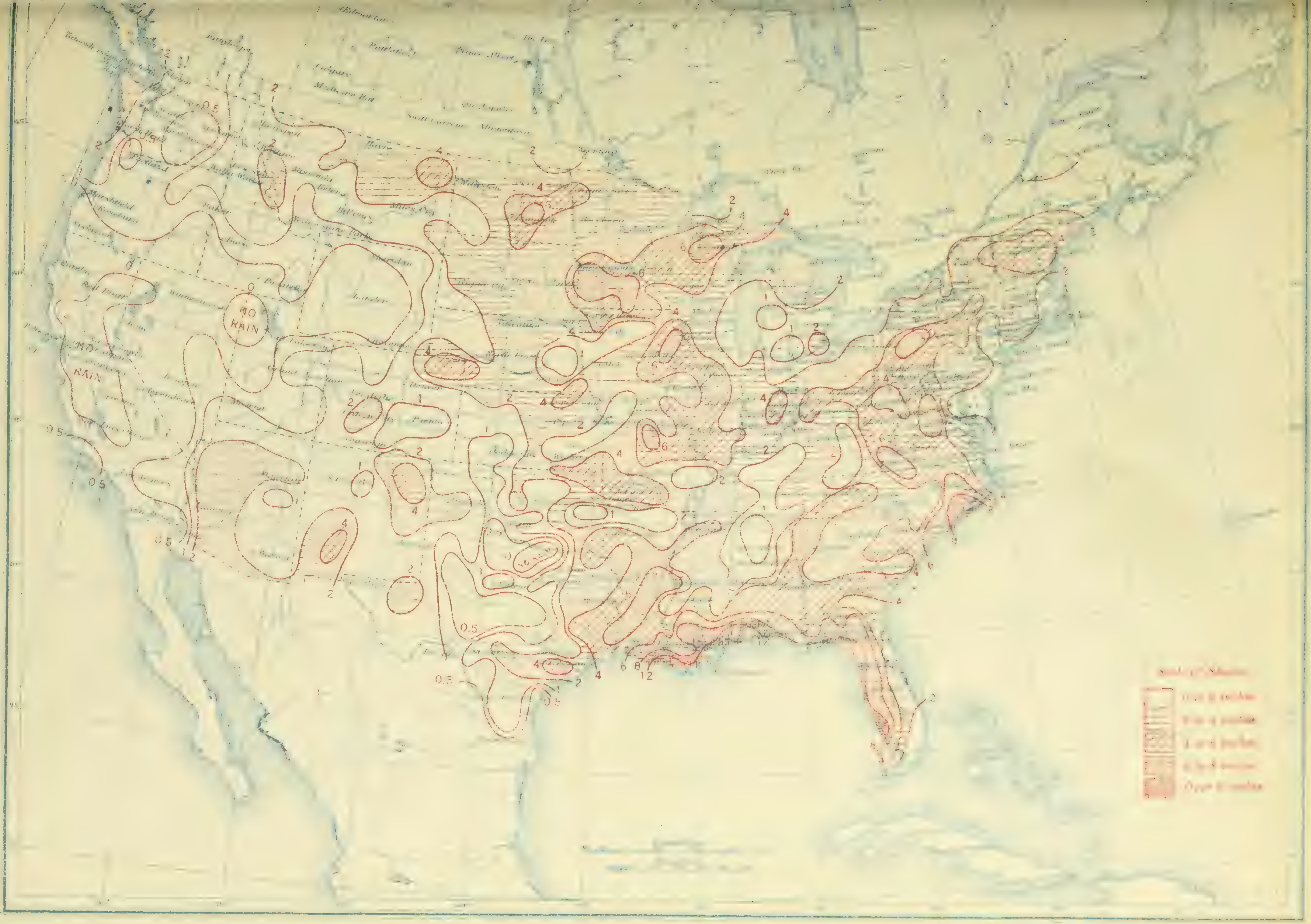
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	85	90	95	99	100	99	96	96	99	100	104	97	96	99	97	99	100	97	95	89	91	95	96	97	88	75	83	89	97	88	88	94.2
	Minimum	54	55	61	68	75	74	74	71	74	70	73	76	70	71	63	67	70	69	69	70	66	51	57	56	67	69	69	68	68	67	69	67.1
Blandville	Maximum	88	92	100	99	100	99	95	95	98	101	103	96	93	95	94	97	99	94	90	81	86	89	92	93	82	77	84	87	89	82	79	91.9
	Minimum	57	60	71	78	79	75	74	74	75	71	76	75	73	73	69	71	71	72	70	71	70	66	60	67	72	71	68	66	69	71	66	70.0
Calhoun	Maximum	..	..	101	99	103	100	98	95	103	105	104	103	103	101	97	98	101	94	94	86	92	92	95	99	96	74	82	88	90	90	81	[b]95.3
	Minimum	..	..	55	73	77	73	72	72	72	72	74	77	75	71	67	67	71	68	70	70	67	62	59	59	70	68	67	68	69	67	66	[b]68.9
Earlington	Maximum	91	97	101	106	108	107	103	97	105	108	111	104	98	104	101	103	102	99	98	90	96	99	100	101	87	74	86	91	95	88	84	97.9
	Minimum	53	53	57	74	74	75	73	73	73	73	73	75	73	69	68	68	68	68	71	69	63	58	58	58	67	67	68	68	69	68	68	67.5
Greenville	Maximum	85	91	98	102	103	104	100	100	104	110	111	106	100	104	103	100	101	98	97	90	96	94	98	99	100	81	85	90	94	91	80	97.3
	Minimum	54	56	65	78	89	73	72	70	72	73	75	77	72	71	67	66	70	66	70	69	64	60	57	56	66	68	67	67	66	67	66	68.0
Hopkinsville	Maximum	89	94	100	102	105	102	100	100	103	107	107	102	98	102	100	102	104	97	94	90	94	90	98	100	92	79	85	91	95	88	83	96.5
	Minimum	54	54	65	77	77	76	73	77	74	74	78	80	76	69	67	66	79	69	71	70	67	60	56	55	59	71	69	66	67	66	66	68.6
Marion	Maximum	89	94	102	105	106	103	101	97	102	104	108	101	96	100	100	102	101	99	92	86	90	93	94	96	94	74	83	88	91	85	82	95.5
	Minimum	50	58	72	76	78	75	74	73	73	75	75	76	73	71	67	68	71	70	69	70	69	63	57	62	70	65	67	67	68	70	60	68.8
Mayfield §§	Maximum	87	95	102	102	103	100	97	98	100	103	106	..	94	99	99	100	104	98	89	87	88	91	94	91	86	75	83	88	89	80	82	[a]93.7
	Minimum	63	54	70	76	79	73	74	72	74	72	74	..	73	72	67	69	69	70	71	70	69	63	55	58	70	67	67	66	66	69	66	[a]68.6
Owensboro §§	Maximum	86	89	98	97	100	98	96	93	99	101	100	96	94	97	95	95	96	93	90	86	90	91	92	96	85	72	80	86	87	86	83	91.8
	Minimum	51	59	72	73	77	73	74	73	74	73	75	76	71	71	68	69	73	70	72	70	67	62	58	62	61	61	69	68	69	69	66	68.7
Paducah (Lone Oak)	Maximum	92	101	105	105	106	104	103	104	101	105	105	103	107	101	100	100	100	97	94	93	92	92	96	99	86	77	86	90	94	85	80	96.9
	Minimum	56	68	72	78	80	72	76	74	71	70	85	83	86	70	73	72	72	70	70	65	70	66	60	68	71	64	66	66	68	69	57	70.6
Princeton §§	Maximum	91	95	87	105	105	104	102	98	103	105	108	103	88	100	99	101	102	100	95	87	91	93	95	95	93	73	80	89	93	89	80	95.1
	Minimum	54	57	67	82	76	70	72	68	71	74	77	71	68	69	68	70	73	73	72	72	71	65	58	56	76	71	68	66	67	67	68	68.9
Russellville §§	Maximum	87	92	96	97	102	102	90	96	101	104	105	99	98	101	100	100	100	99	94	90	92	95	99	98	98	84	85	90	96	89	82	95.5
	Minimum	54	54	57	65	76	73	74	74	74	73	74	75	71	73	69	76	76	77	71	71	65	59	57	57	65	65	69	66	67	67	67	68.1
Central Division.																																	
Alpha	Maximum	77	80	84	90	91	95	88	90	92	94	94	91	90	93	91	92	93	87	83	82	81	85	89	90	91	87	81	78	85	84	75	87.2
	Minimum	55	57	60	70	70	79	70	69	70	79	75	75	69	77	70	69	67	69	68	67	63	58	58	60	59	65	68	69	68	67	68	67.4
Anchorage	Maximum	84	87	93	97	102	101	99	93	99	99	97	97	96	98	92	93	95	90	88	92	92	96	96	99	86	72	79	86	85	88	78	91.9
	Minimum	51	56	64	71	75	76	68	71	74	75	75	71	68	68	70	69	61	69	67	65	62	65	67	55	67	68	68	66	62	64	59	66.7
Bardstown §§	Maximum	91	92	95	97	104	106	100	94	101	103	105	99	97	101	98	100	100	97	94	93	96	98	99	100	96	81	86	87	85	89	83	95.7
	Minimum	52	55	62	65	75	74	73	73	70	74	73	75	72	67	70	68	67	65	65	64	64	59	60	57	56	67	68	68	67	65	64	66.3
Bowling Green §§	Maximum	89	95	96	97	105	103	100	98	103	106	105	102	98	103	103	98	101	99	93	90	95	97	98	100	96	86	85	92	95	89	84	96.8
	Minimum	56	59	64	61	62	74	74	72	74	74	74	74	70	72	72	69	62	70	69	68	64	61	60	60	60	70	69	66	66	66	66	67.0
Edmonton	Maximum	..	..	..	93	96	..	97	95	98	97	100	97	96	..	..	98	98	98	89	..	..	..	..	..	89	..	91	89	91	..	89	[m]88.9
	Minimum	..	..	..	68	72	..	73	71	69	69	69	73	65	..	..	67	67	67	67	..	..	..	..	..	59	..	73	60	60	..	57	[m]67.0
Eubank §§	Maximum	86	88	89	92	96	102	96	93	95	95	99	95	94	95	94	94	96	91	87	89	91	93	95	97	94	89	83	88	87	88	84	92.1
	Minimum	51	53	57	64	71	71	67	66	67	70	69	70	65	67	67	68	63	63	66	61	60	55	55	54	56	58	66	66	06	67	67	63.4
Frankfort	Maximum	83	88	91	95	101	100	98	96	98	97	96	97	95	96	90	89	94	89	87	88	91	94	94	94	93	83	80	85	85	87	79	91.4
	Minimum	55	59	66	70	78	74	70	72	75	76	77	76	71	76	72	70	69	72	69	65	67	65	62	60	65	69	69	68	67	66	67	68.9
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg	Maximum	83	86	90	93	94	97	95	93	97	94	96	94	93	96	96	94	95	92	87	84	86	90	92	93	94	85	84	89	90	91	80	91.1
	Minimum	56	55	63	75	73	70	67	69	73	69	70	72	67	68	68	68	67	68	68	65	63	58	57	57	59	66	67	68	64	63	65	65.7
Irvington	Maximum	84	86	95	98	100	99	97	92	98	99	98	98	95	97	93	92	96	93	89	91	92	94	94	95	89	74	82	89	85	87	77	91.9
	Minimum	50	68	67	72	75	77	75	75	77	77	79	80	73	75	70	69	70	71	70	70	67	62	64	60	70	64	69	69	69	69	66	70.0
Junction City	Maximum	85	87	89	94	99	101	98	95	96	93	99	95	93	97	94	93	97	91	88	89	91	93	96	97	95	87	86	86	88	90	85	92.5
	Minimum	55	56	60	66	67	74	68	69	70	71	75	77	68	69	68	68	65	67	67	61	64	57	55	55	60	67	68	67	65	65	67	65.5
Leitchfield	Maximum	86	91	94	97	101	101	98	96	99	101	103	98	94	98	93	90	96	93	89	88	91	93	94	96	92	77	81	87	87	87	78	92.5
	Minimum	54	56	63	74	75	73	73	71	75	70	75	75	68	70	69	68	69	69	68	68	65	59	58	58	66	66	67	67	67	64	66	67.3
Lexington	Maximum	83	85	89	92	97	100	95	90	93	93	95	93	91	93	87	89	90	85	82	88	90	91	92	93	90	82	80	82	79	84	76	88.7
	Minimum	64	66	71	74	75	71	70	76	76	77	75	79	74	70	70	70	74	70	65	63	69	71	72	71	67	67	65	66	68	65	64	70.2
Loretto	Maximum	89	91	94	98	104	105	97	95	101	101	104	99	96	100	97	95	98	95	90	89	91	92	95	97	95	82	90	90	90	94	82	94.7
	Minimum	50	54	60	76	75	72	68	70	77	73	75	78	68	72	68	67	67	68	70	68	71	76	75	70	69	59	60	60	60	75	60	68.1
Louisville	Maximum	84	88	92	98	105	100	98	89	98	97	96	96	93	95	91	92	95	90	88	88	90	92	94	96	84	72	77	86	82	85	77	90.6
	Minimum	61	64	72	76	79	77	76	80	79	81	79	80	76	71	73	72	74	72	71	69	71	69	70	66	70	70	68	70	70	69	65	72.3
Do. (Cherokee Park)	Maximum	80	85	89	93	97	95	93	90	94	93	90	93	91	94	88	89	90	86	85	86	87	88	90	91	83	72	77	83	81	83	76	87.5
	Minimum	55	58	65	70	75	75	71	73	76	76	75	76	71	71	70	69	68	69	68	67	67	65	61	59	67	67	67	67	66	66	65	77.8
St. John §§	Maximum	83	86	89	98	102	98	95	92	99	95	97	94	92	98	96	91	95	90	86	85	90	91	93	97	89	77	80	86	87	88	81	91.0
	Minimum	54	56	61	68	75	72	71	69	74	70	75	76	66	69	66	67	66	68	70	67	63	60	58	57	64	68	67	68	66	62	66	66.4
Scott	Maximum	85	89	90	95	102	102	98	93	89	95	94	99	96	95	88	93	85	87	88	91	94	94	96	94	84	74	78	82	83	81	78	90.1
	Minimum	55	58	64	70	78	77	74	73	75	76	77	73	72	75	68	66	66	67	63	63	66	68	62	68	66	68	68	65	66	62	65	68.2
Shelbyville	Maximum	87	91	96	99	105	106	99	94	99	99	100	100	98	99	95	95	98	91	90	92	95	98	99	99	91	77	82	85	87	88	81	94.0
	Minimum	51	53	58	69	74	73	68	72	72	75	74	75	68	70	70	68	67	70	67	68	65	61	58	57	63	67	67	65	64	65	65	66.4
Taylorsville	Maximum	84	89	92	96	103	101	96	93	98	98	97	96	94	97	92	92	92	90	86	88	89	91	94	95	88	79	80	84	84	85	78	91.0
	Minimum	52	55	66	68	77	71	69	71	73	76	76	75	66	70	71	68	66	69	66	67	62	60	55	55	62	69	68	68	65	69	67	66.8
Williamstown §§	Maximum	87	90	90	96	103	105	98	94	98	95	95	100	96	98	92	95	95	90	92	91	95	96	98	98	92	73	78	82	82	86	78	92.2
	Minimum	56	58	64	68	73	78	71	74	74	76	76	75	75	74	68	67	67	67	65	61	67	67	68	66	66	66	68	66	66	66	65	68.4
Eastern Division.																																	
Beattyville	Maximum	87	90	..	97	100	102	100	97	98	90	99	98	97	99	94	94	96	93	87	93	95	96	98	99	100	95	92	89	86	92	84	[a]94.6
	Minimum	57	59	60	64	72	70	68	68	71	69	66	72	69	68	68	66	60	68	66	57	60	59	61	58	57	62	67	66	64	62	66	64.5
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	86	88	89	93	100	101	100	95	97	85	95	97	95	96	90	92	96	88	85	88	92	93	94	95	92	92	87	84	83	89	80	91.5
	Minimum	52	56	58	65	76	70	67	67	70	69	69	68	68	68	69	61	61	67	66	56	59	61	60	57	68	61	63	65	63	59	65	64.0
Maysville §§	Maximum	87	90	94	98	103	104	103	97	99	98	95	100	99	98	91	93	95	88	86	91	96	98	98	99	97	85	85	86	83	89	80	93.7
	Minimum	57	58	63	59	69	71	70	70	72	72	71	71	71	71	70	62	62	66	68	57	57	61	62	58	58	63	68	61	61	64	64	64.7
Middlesboro	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mount Sterling §§	Maximum	81	86	90	95	98	100	96	96	96	91	99	97	97	97	88	92	95	85	82	88	90	92	96	95	94	92	80	85	86	87	88	91.5
	Minimum	53	61	63	64	63	75	75	68	71	74	74	72	70	71	69	66	66	59	66	59	63	63	63	59	62	66	66	64	66	62	62	65.6
Richmond §§	Maximum	85	88	88	96	99	103	97	94	98	92	100	97	96	97	88	94	96	86	88	90	93	94	97	97	97	89	85	84	82	88	80	92.2
	Minimum	57	60	65	70	75	76	69	69	75	76	73	75	72	74	69	70	70	71	70	62	67	67	64	65	66	68	68	66	68	64	67	68.6
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	85	75	86	89	91	91	92	85	79	85	83	83	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	68	62	51	55	55	50	54	70	55	53	50	50	......
Williamsburg	Maximum	83	83	85	95	97	100	98	95	93	97	94	96	95	96	95	94	95	87	88	86	90	91	93	94	96	91	89	85	89	88	85	91.7
	Minimum	58	58	61	62	64	71	68	69	73	70	68	66	63	66	68	66	68	59	68	61	59	58	59	59	56	62	67	68	64	60	68	64.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

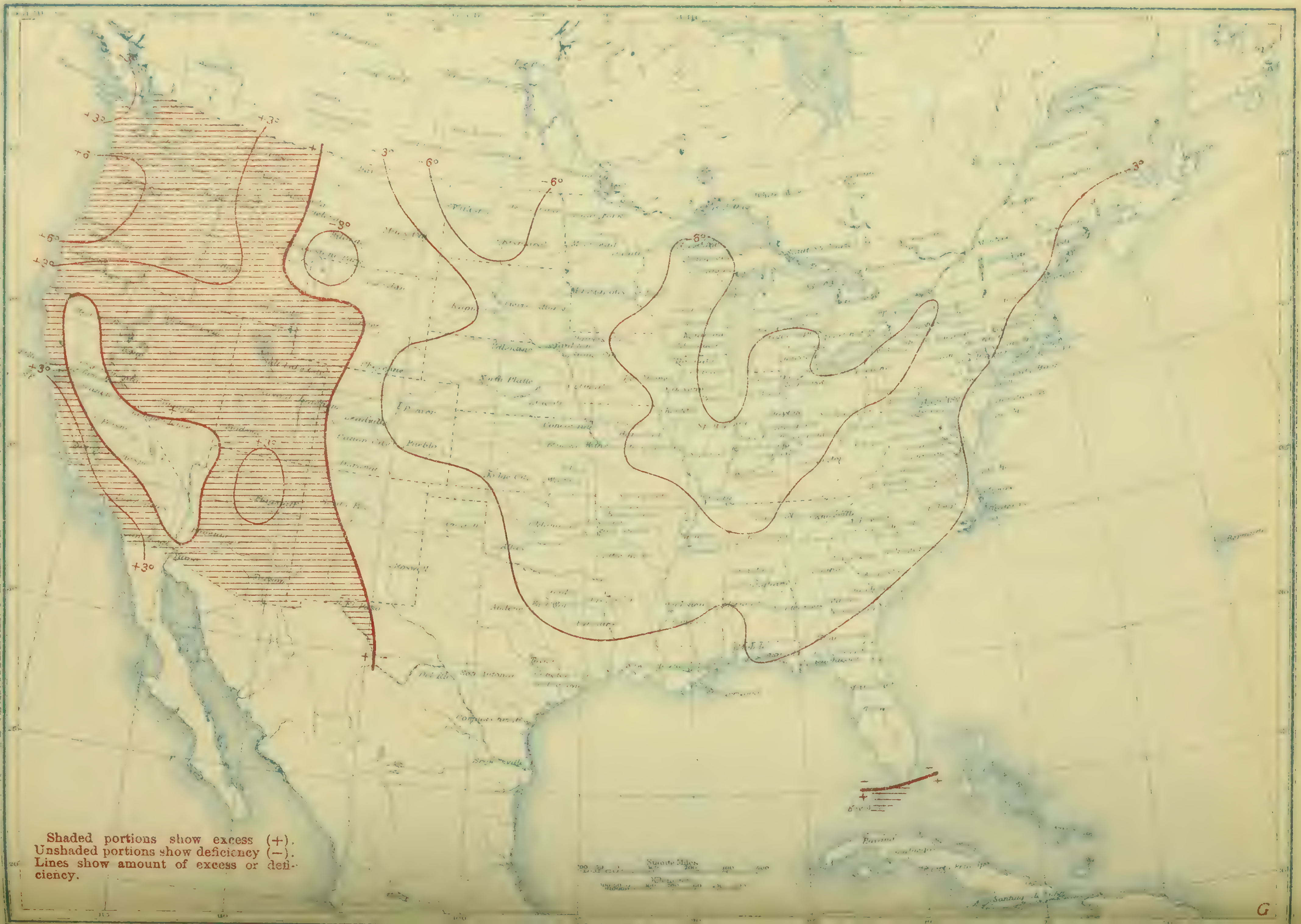
KENTUCKY SECTION

SEPTEMBER, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 22, 1918

Departure of the Mean Temperature from the Normal, September, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., September, 1918. No. 9

GENERAL SUMMARY.

This was by far the coldest September since the beginning of State averages in 1889, as well as the coldest since Weather Bureau records were begun at the regular stations in 1872. The persistent cold, with low maximum as well as low minimum temperatures, suggest October rather than September weather; in fact, there have been two warmer Octobers during the period 1889-1918 and several but little colder than this month. At Louisville the temperature not only averaged more than 7° daily below normal, but there was not a day with average temperature above, and only one day when average temperature reached normal. The Louisville record is very nearly typical of all sections. It was slightly warmer in the eastern counties, but colder in western districts.

Because of the drought and intense heat in August, and vegetation therefore practically at a standstill when the rains began late in that month, there was all the greater need of warmth during September to accelerate the growth of late crops. While considerable improvement occurred as a result of the rains, the effect of the unseasonable cold was to retard development and crops matured slowly, particularly corn and tobacco, much of the latter crop being still in the field at the end of the month.

Precipitation averaged near normal, being deficient in only a few localities. The soil was in good condition for plowing, for which the cool weather was favorable, and preparation of ground for wheat made rapid progress with indications of a large acreage. Some wheat had been sown at the end of the month. Frosts occurred on several days during the last decade, but the damage was slight and confined mostly to tender vegetables in exposed localities.

PRESSURE.

Low pressure formations, mostly shallow troughs, passed over or near this section, influencing weather conditions during the periods: 2d-4th, 11-12th, 15-16th, 18-19th, and the 25th. High pressure areas dominated during the periods: 1st, 6-10th, 13-14th, 17th, 20th-23d, and 26-30th.

The mean sea-level pressure, computed from the records of two stations, was 30.09 inches. The extremes were 30.51 inches on the 22d and 29.84 inches on the 12th, both at Lexington.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 62.8°, which is 7.2° below normal and 4.4° lower than the lowest previous average temperature for September for the State. Maximum temperatures were unusually low, seldom above 80° and rarely reaching 85°; while minimum temperatures as a rule registered below 50°, and between 30° and 45° after the 12th. The extremes were 92° at Earlington on the 10th, and 30° at Greensburg and Junction City on the 22d.

PRECIPITATION.

The average precipitation for the State, determined from the reports of 51 stations, was 2.94 inches, which is slightly above normal. Rainfall was well distributed through the month, occurring mostly in the periods 2d-5th, 11-12th, 15-20th, and 25-27th. The heaviest rainfall, as a rule, was in the first period and when it was most needed. In the extreme western counties monthly amounts ranged between 5 and 7 inches. Except for a narrow strip extending from Meade to Madison County, where the total rainfall was less than two inches, monthly amounts were not far from normal over the rest of the State and generally sufficient for farming needs. At the various stations amounts ranged between 1.26 inches at Edmonton and 7.13 inches at London. Thunderstorms occurred generally on the 4th, 12th and 16th.

WIND.

The total wind movement at Louisville was 6,418 miles, and at Lexington 7,516 miles, with average hourly velocities of 8.9 and 10.4 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 36 miles per hour from the west on the 12th, and at Lexington 33 miles from the northwest on the 19th.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 82 per cent, at 12 noon 49 per cent, and at 7 p. m. 58 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 75 and at Lexington 52.

MISCELLANEOUS.

September 2.—A flour mill was destroyed by lightning at Hopkinsville, with a loss of about $60,000.

September 4.—A church and residence were damaged by lightning at Mt. Washington.

September 16.—A stockbarn was destroyed by lightning near Glasgow. Great damage was caused by a severe wind and hailstorm in a strip of country 12 miles long by 8 miles wide in Green County. Many buildings were unroofed, and standing corn and tobacco practically destroyed.

September 26.—A severe hail and windstorm destroyed several buildings and hundreds of acres of tobacco in Adair County.

Rivers.—The navigable streams were low during the month, the stages being controlled by locks and dams.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	72.1	+2.1	101	36	1.23	−1.53	..
1890	67.0	−3.0	95	36	2.71	−0.05	..
1891	69.5	−0.5	97	42	1.89	−0.87	..
1892	68.5	−1.5	93	38	2.68	−0.08	..
1893	69.6	−0.4	99	35	3.24	+0.48	..
1894	71.7	+1.7	98	37	2.71	−0.05	..
1895	73.4	+3.4	101	27	1.10	−1.66	3
1896	68.6	−1.4	100	30	3.77	+1.01	7
1897	72.8	+2.8	105	31	0.21	−2.56	1
1898	73.4	+3.4	103	42	4.36	+1.60	9
1899	68.7	−1.3	105	27	1.66	−1.10	5
1900	74.6	+4.6	102	35	2.25	−0.51	6
1901	68.1	−1.9	98	33	3.57	+0.81	6
1902	67.3	−2.7	97	29	4.01	+1.25	10
1903	69.1	−0.9	100	32	0.91	−1.85	4
1904	71.1	+1.1	99	34	2.58	−0.18	5
1905	70.2	+0.2	95	36	2.61	−0.15	6
1906	73.0	+3.0	95	45	6.15	+3.39	13
1907	69.1	−0.9	102	35	3.00	+0.24	6
1908	71.6	+1.6	101	30	1.03	−1.73	3
1909	67.7	−2.3	97	32	2.51	−0.25	6
1910	71.8	+1.8	99	38	4.41	+1.65	9
1911	74.3	+4.3	99	46	3.71	+0.95	10
1912	71.0	+1.0	103	33	2.80	+0.04	7
1913	69.6	−0.4	106	29	2.49	−0.27	9
1914	67.8	−2.2	97	36	2.96	+0.20	6
1915	70.7	+0.7	99	32	3.32	+0.56	7
1916	67.2	−2.8	98	32	3.48	+0.72	6
1917	67.7	−2.3	98	34	2.56	−0.20	5
1918	62.8	−7.2	92	30	2.94	+0.18	8

Climatological data for September, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	411	15	63.0	-7.6	87	2†	32	22	45	2.16	-0.36	0.86	0	6	22	3	5	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	63.1	-7.9	86	3	39	21	27	6.87	+3.72	2.73	0	9	10	8	12	ne.	E. W. Horr.
Calhoun	McLean	437	14	63.4	-8.8	86	3	35	21†	38	2.81	+0.21	1.00	0	9	11	12	7	se.	W. A. Taylor.
Earlington	Hopkins	420	27	65.5	-5.0	92	10	36	20†	45	2.12	-0.93	0.70	0	7	16	1	13	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	^{a}64.6	......	87a	3	34^{a}	23	44^{a}	2.59	......	0.76	0	7	22	5	3	w.	C. R. Lovell.
Henderson	Henderson	327	9	......	......	......	......	......	......	......	3.79	+1.24	1.50	0	7	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	21	65.4	-6.5	89	3	36	21	40	5.84	+2.81	1.80	0	9	10	9	11	nw.	W. E. Graves.
Marion	Crittenden	571	19	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	B. C. Paris.
Mayfield	Graves	364	8	64.6	-6.5	85	3	36	20	39	2.60	-0.23	0.80	0	8	13	9	8	n.	J. N. Davis.
Owensboro	Daviess	479	21	61.7	-9.0	83	10	38	22	36	3.42	+0.60	1.28	0	5	15	8	7	sw.	Henry S. Berry.
Paducah	McCracken	341	18	64.6	-9.4	88	14	38	21	35	5.04	+2.07	2.00	0	12	18	2	10	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{b}62.6	......	87^{b}	3	37^{b}	21	40^{b}	3.41	+0.67	1.20	0	6	19^{b}	0^{b}	9^{b}	n.	Ray Baker.
Russellville	Logan	590	6	63.8	-7.7	91	3	37	21†	42	2.54	-0.54	1.64	0	8	20	3	7	s.	E. C. Shelto n.
Central Division.																				
Alpha	Clinton	811	24	62.8	-7.9	83	3	36	22	31	3.31	+0.15	2.51	0	3	15	5	10	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	61.0	-8.1	84	2†	32	22	40	2.55	-0.27	1.03	0	8	21	5	4	sw.	C. E. Barret.
Bardstown	Nelson	637	21	61.9	-10.0	91	3	31	22	47	2.40	-0.50	0.85	0	5	16	0	14	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	61.5	-7.2	91	3	37	22†	46	2.34	-0.79	1.05	0	9	16	9	5	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......	......	......	......	......	......	......	2.33	......	1.07	0	9	......	......	......	......	James H. Young.
Burnside	Pulaski	773	25	......	......	......	......	......	......	......	3.97	+0.71	1.10	0	8	......	......	......	......	C. L. Hurt.
Carrollton	Carroll	492	18	......	......	......	......	......	......	......	2.16	-0.67	0.57	0	8	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	4	......	......	......	......	......	......	......	2.57	......	0.95	0	8	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{c}62.4	-7.3	88^{c}	2†	32^{c}	22	43	1.26	-2.09	0.80	0	3	18^{c}	6^{c}	3^{c}	n.	P. W. Ray.
Eubank	Pulaski	1177	23	61.4	-7.3	89	1	31	22	41	4.21	+0.69	1.44	0	7	12	10	8	ne.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	62.6	-6.0	86	2	36	22	35	1.80	-1.06	0.55	0	7	14	5	11	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Greensburg	Green	581	25	61.4	-8.6	87	2†	30	22	42	2.80	-0.26	0.90	0	12	7	2	21	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......	......	......	......	......	......	......	2.82	-0.06	0.90	0	9	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	20	61.9	-8.5	81	2	37	22	31	1.65	-1.34	0.64	0	5	20	3	7	w.	W. J. Piggott.
Junction City	Boyle	985	24	62.6	-7.0	88	3	30	22	45	2.72	-0.30	0.90	0	8	16	9	5	w.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	61.6	-8.2	85	2	35	22	36	2.60	-1.04	1.20	0	7	15	8	7	sw.	John E. Stone.
Lexington	Fayette	989	30	62.4	-5.5	84	2	40	27	26	1.41	-1.01	0.65	0	10	12	11	7	se.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	64.4	-5.8	88	2†	41	23†	39	......	......	......	......	......	20	8	2	......	Loretto Academy.
LOUISVILLE	Jefferson	525	45	62.7	-7.2	83	9	42	22	31	2.19	-0.44	0.99	0	9	13	7	10	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	60.4	-7.6	80	2	36	22	31	2.46	-0.71	1.20	0	10	16	4	10	s.	Wm. I. Hunt.
St. John	Hardin	777	21	60.8	-8.3	85	2	34	22	41	3.41	+0.29	1.60	0	8	24	2	4	......	Sisters of Loretto.
Scott¶	Kenton	900	20	60.6	-8.9	84	9	34	22†	36	2.35	-0.20	0.92	0	9	12	11	7	n.	E. B. Wilson.
Shelbyville	Shelby	825	29	61.5	-7.7	86	2	32	22	43	1.93	-0.92	0.80	0	7	16	6	8	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	60.2	-6.0	84	2†	31	22	41	1.35	-2.10	0.50	0	10	12	7	11	ne.	E. D. Bourne.
Williamstown	Grant	943	15	63.0	-5.4	87	3	40	21†	38	2.97	-0.12	1.07	0	5	5	9	16	......	Miss Rose Carter.
Woodbury	Butler	533	0	......	......	......	......	......	......	......	2.65	......	0.85	0	9	......	......	......	......	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	64.5	-4.6	90	3†	36	22†	43	2.75	-0.30	0.66	0	8	14	4	12	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16	^{c}61.8	-7.5	85	4	32	22	42	......	......	......	......	......	......	......	......	......	H. E. Way.
Catlettsburg‡	Boyd	534	29	......	......	......	......	......	......	......	2.06	-0.54	0.48	0	11	......	......	......	......	Forester Farley.
Cynthiana	Harrison	681	0	......	......	......	......	......	......	......	2.55	......	0.90	0	6	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	29	......	......	......	......	......	......	......	3.00	+0.54	0.87	0	7	15	4	11	se.	J. V. Oldham.
Farmers	Rowan	668	10	62.1	-6.4	87	2†	32	23	46	2.45	-0.64	0.65	0	7	21	2	7	w.	Durwood Cassity.
Harlan	Harlan	1197	0	64.7	......	86	2†	40	22	33	3.92	......	1.23	0	9	13	9	8	s.	Will Ward Duffield.
Jackson	Breathitt	776	6	......	......	......	......	......	......	......	3.77	......	1.10	0	7	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	3	......	......	......	......	......	......	......	7.13	......	2.20	0	10	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	14	......	......	......	......	......	......	......	2.01	-0.56	0.48	0	11	......	......	......	......	Miss Carrie S. Adams.
Maysville	Mason	524	20	63.6	-6.0	89	4	38	22	40	2.38	-0.25	0.44	0	10	20	6	4	n.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	B. H. Perkins.
Mount Sterling	Montgomery	930	28	61.6	-6.0	87	2†	34	22	45	3.43	+0.54	0.94	0	10	19	6	5	e.	W. R. McKee.
Pikeville	Pike	634	12	......	......	......	......	......	......	......	3.74	+0.90	1.72	0	11	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	62.9	-7.7	87	4	37	22†	41	1.93	-0.71	0.45	0	9	14	6	10	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	O. A. Lund.
Williamsburg	Whitley	939	20	64.2	-6.4	87	4	37	21†	44	3.25	-0.11	1.10	0	6	15	4	11	w.	N. C. Jones.
State averages and extremes				62.8	......	92	10	30	22	47	2.94	......	2.73	0	8	15	6	9	w.	

All temperature data are taken from self registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ‡‡ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for September, 1918.

Stations.		Day of month																															[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam ‖	G			.11		.56											[illegible]	.15									[illegible]	[illegible]					2.16
Blandville	M		[illegible]	[illegible]	[illegible]							.05				.01	2.11			.12						.32	[illegible]						[illegible]
Calhoun	G		.31	[illegible]	.30	.52						T.	.17			T.	1.00	.13	.03	T							.33						[illegible]
Earlington ‖	G			.70	.06	.33							T.				[illegible]	.15			T						.27	[illegible]					2.12
Greenville	G		.70	.02	.23	[illegible]											.76			.03							[illegible]						2.59
Henderson ‡‖	O.			.36	.30	1.50	T					T	[illegible]				[illegible]	[illegible]		T.							[illegible]						[illegible]
Hopkinsville ‖	C		.43	.85	1.80	.90	.48						T.				.81	T			.19							[illegible]	[illegible]				[illegible]
Marion	O																																
Mayfield ‖	M			.15		[illegible]											.80	.18	.06			[illegible]					.70	.11					[illegible]
Owensboro ‖	O			.80	[illegible]	.94						T	[illegible]			T	.28																[illegible]
Paducah	O		.11	.30	.88	.73						.03	.01			.03	2.00	.06		.13						[illegible]	[illegible]						[illegible]
Princeton	G.			.45	.55	1.20						T					.65	.55									.01						[illegible]
Russellville ‖	G				.14	1.64	.01										.31	.13			.14						.08	[illegible]					[illegible]
Central Division.																																	
Alpha	C		.30		T.	2.51		T.				T.	T.				.50	T.			T.												3.31
Anchorage	O		.11	.22	.58	.08							1.03		T	.16	.31		T.	.06							T.						2.55
Bardstown ‖	S		.25		.85							.60				.15	.55																[illegible]
Bowling Green ‖	G.			.48	.05	1.05	.03						.03			T.	.30	.22			.08							.10					[illegible]
Brownsville ‖	G.			.35	.11	1.07							.06				.33	.22			.07						.07	.05					2.33
Burnside ‖	C.	.21		.67	.28	1.10	.60							T.				.57			.44							.10					3.97
Carrollton ‖	O			.30		.70							.57	.02		.02	.33	.12			.10												2.16
Cloverport ‖	O			.24		.70							.95			T.	.30	.30	.06		T.						.01	.01					2.57
Edmonton	G					.80												.20									.26						1.26
Eubank ‡‖	C.	.37		.40		1.44	.83						.37					.24										.56					4.21
Frankfort ‖	K.	.03		.45		.55							.46				.06	.17	T.		.08						T.						1.80
Franklin	G.																																
Greensburg ‡‖	G.			.24	.25	.90	.21						.15			.06	.06	.56	.02		.02						.06	.27					2.80
High Bridge ‡‖	K.	.01		.13		.90	.17						.65	.05			.40	.18			.03												2.82
Irvington	O.		.23	.24	.64							T	.33			T.	.21		T.	T.							T.						1.65
Junction City	K			.04		.71		.01	T.				.50	T.			.90	.26	T.	.03							.24						2.72
Leitchfield	G		.30		1.20	.08						T.	.02				.58			.17							.25						2.60
Lexington ***	K.		.01	.09	.47	.18						.03	.36			.07	.14	.01	T.	.05							T.						1.41
Loretto	S.																																
LOUISVILLE***	O.		.23	.13	.41							.04	.95		T.	.16	.25		T.	.01							.01						2.19
Do. (Cherokee Park)	O.		.12	.24	.36	.07						T.	1.20			.25	.13	.03		.04							.02						2.46
St. John ‖	S			.43		1.60							.85				.11	.23			.14						.01	.04					3.41
Scott	L.		T.	.11	.43	.12						T.	.92			.18	.39	.07		.12	.01												2.35
Shelbyville ‡‖	S.			.24		.80											.15	.48	.10		.08						.08						1.93
Taylorsville	S.		.05	.07	.15	.16						T	.50			.06	.24	.01	.03	.08							T.						1.35
Williamstown ‡	L	.04		1.07		.58							.66	.02		T.	.28	.15	.05		.12												2.97
Woodbury ‖	G			.53	.30	.85							.05				.47	.19			.20						.02	.04					2.65
Eastern Division.																																	
Beattyville ‡‖	K.	.38		T.		.66	.59						T.	.32			.03	.21	T.		.42	T					T.	.14					2.75
Berea	K.					*	.10					.01	.66				.08	.05		.08							.30						1.28
Catlettsburg ‖	B.	.17		.40	.02	.14	.30						.08	.07			.05	.48			.33						.02						2.06
Cynthiana ‡‖	L.			.90		.50	T.						.65	T.			.20	.20		.10	T.												2.55
Falmouth ‖	L.			.75		.59							.87				.38	.22	.07		.12												3.00
Farmers	L.			.40		.69							.54				.20	.45		.05	.12												2.45
Harlan	K.			.34		1.23		.51	.52				.10				T.	.12		.20	.42						.48						3.92
Jackson ‖	K.	.45		T.		1.10	.90						T.	.30				.40			.50							.12					3.77
London ‡‖	C.	.42		.98	1.00	2.20	1.10						.10					.60			.50						.03	.20					7.13
Louisa ‖	B.	.15		.09	T.	.09	.19						.07	.38			.07	.43	.01		.48	T.					.05	T.					2.01
Maysville ‡‖	O.	.16		.29		.31	.09						.27	.44			.40	.22	.01		.19												2.38
Middlesboro	C.																																
Mount Sterling ‖	L.	.08		.94		.72	.15						.10	.12			.22	.68	T.		.40						.02						3.43
Pikeville ‖	B.	1.72		.12	.06		.52		.12				T.	.12				.32	.06		.42	.12						.16					3.74
Richmond ‖	K.	.10		.05		.45	.25					T.		.44			.10	.22			.12						T.	.20					1.93
Weeksbury	B.																																
Williamsburg ‡‖	C.	.45		T.	T.	.08	1.10							T.				.76			.46						T.	.40					3.25

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖. Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

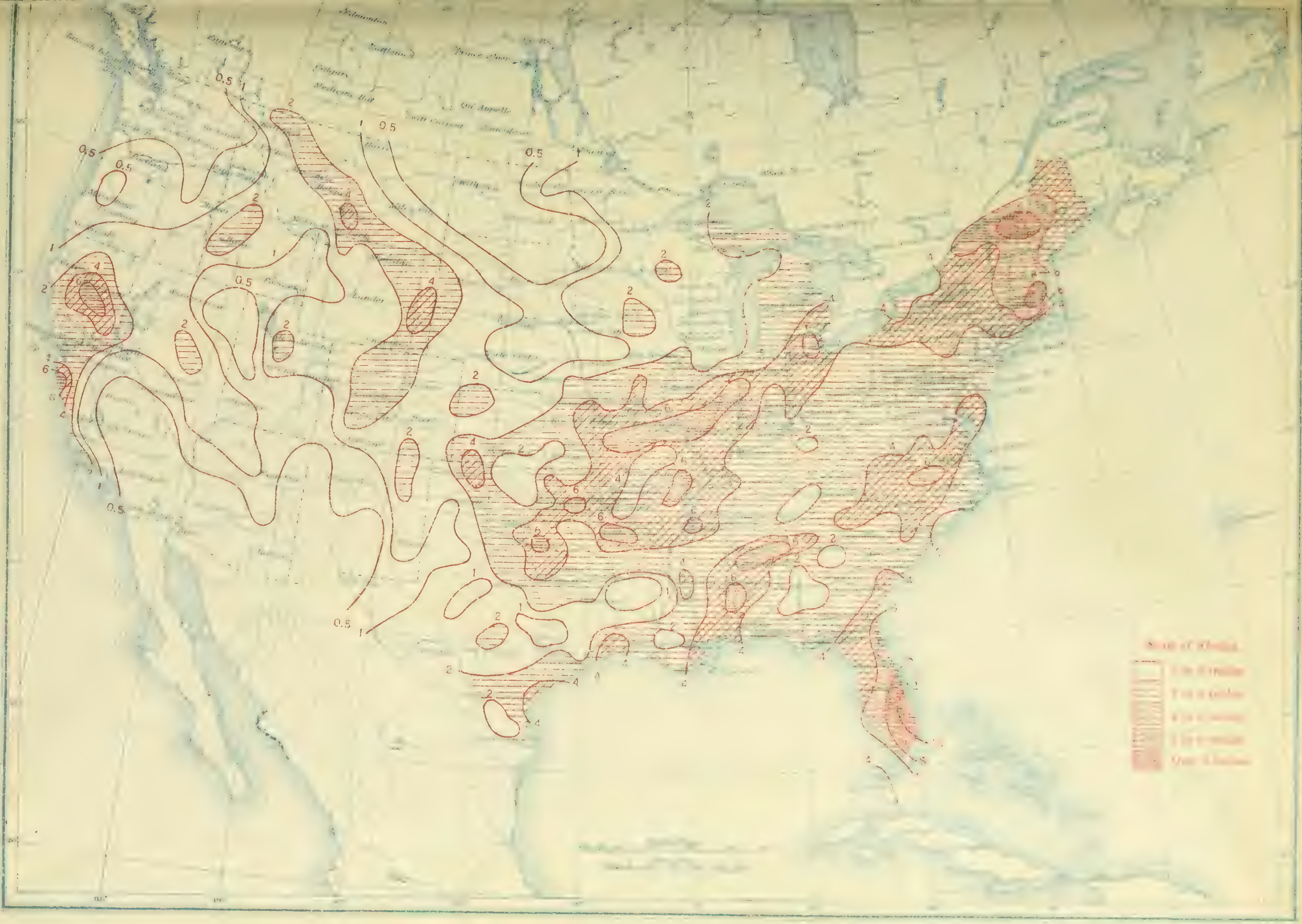
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for September, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam §§	Maximum	84	87	87	80	74	74	76	80	86	86	78	77	75	87	77	74	73	79	67	64	77	71	78	83	86	72	72	79	81	85	..	78.3
	Minimum	51	51	63	61	60	48	48	46	46	55	53	54	42	45	63	55	47	43	53	45	33	32	34	41	41	60	43	36	41	41	..	47.7
Blandville	Maximum	80	78	86	73	71	71	72	76	78	80	80	76	74	83	78	66	67	76	65	58	60	64	72	75	76	72	63	58	75	76	..	72.6
	Minimum	55	61	66	62	61	53	56	55	56	58	67	61	50	57	66	54	46	55	50	43	39	42	45	49	53	57	45	47	49	49	..	53.6
Calhoun	Maximum	83	84	86	80	75	73	74	79	84	85	77	75	74	83	76	71	71	76	75	62	65	69	76	81	84	75	67	75	79	81	..	76.5
	Minimum	53	56	64	67	59	49	53	53	51	58	55	60	46	49	62	61	45	51	49	42	35	35	38	45	46	53	42	41	46	44	..	50.3
Earlington	Maximum	86	86	88	82	73	71	78	84	88	92	83	82	85	51	83	75	78	83	79	63	68	74	81	86	89	70	70	76	82	80	..	80.2
	Minimum	51	56	65	56	61	51	52	48	49	54	55	65	45	49	66	62	48	55	52	46	36	36	36	45	46	61	43	43	48	43	..	50.8
Greenville	Maximum	84	86	87	84	84	74	74	79	84	88	79	80	76	87	81	75	72	77	72	64	61	..	78	82	83	79	69	75	80	85	..	^{a}78.6
	Minimum	52	55	64	66	60	50	52	52	49	52	54	65	45	47	66	64	47	50	51	45	35	..	34	45	45	57	42	40	44	43	..	^{a}50.7
Hopkinsville	Maximum	87	86	89	83	78	75	77	74	84	85	81	79	79	88	80	76	75	79	72	65	68	72	79	83	75	74	67	76	83	86	..	78.5
	Minimum	66	56	65	68	60	51	54	52	51	52	52	67	45	49	59	65	59	52	52	47	36	38	39	45	43	60	47	46	45	46	..	52.2
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mayfield §§	Maximum	81	80	85	79	71	71	75	77	81	82	80	79	79	85	87	72	71	78	61	64	63	70	76	78	81	63	63	72	80	80	..	78.2
	Minimum	54	59	60	69	61	52	55	49	51	52	55	62	47	47	58	65	49	50	55	36	45	39	40	46	48	51	44	44	41	44	..	50.9
Owensboro §§	Maximum	80	82	81	78	66	70	72	77	80	83	77	72	69	80	77	67	67	73	58	57	59	65	73	78	80	67	65	70	75	77	..	72.5
	Minimum	53	54	65	67	60	51	51	57	52	53	57	60	47	52	52	64	49	48	58	44	40	38	42	42	48	50	44	41	43	45	..	50.9
Paducah (Lone Oak)	Maximum	84	82	86	84	85	75	75	81	82	83	84	79	79	88	78	75	70	72	79	63	59	69	76	81	81	65	68	70	77	72	..	76.7
	Minimum	59	57	66	61	61	52	55	52	55	56	69	50	52	55	66	55	47	52	50	44	38	44	44	46	51	50	44	52	46	44	..	52.4
Princeton §§	Maximum	85	84	87	81	68	72	78	78	..	84	81	67	72	81	76	71	70	77	..	60	68	70	77	81	84	63	55	73	78	80	..	^{b}75.0
	Minimum	52	53	65	66	61	52	52	56	51	..	57	58	45	47	57	65	47	48	51	..	37	38	38	44	44	45	42	44	45	44	..	^{b}50.1
Russellville §§	Maximum	84	86	91	82	65	72	76	78	81	84	80	77	77	87	83	83	71	78	61	62	64	68	77	81	85	65	83	81	83	84	..	77.6
	Minimum	53	60	65	65	60	51	51	50	51	51	50	56	46	46	57	62	51	51	53	45	37	37	38	39	48	49	45	43	44	46	..	50.0
Central Division.																																	
Alpha	Maximum	78	79	83	82	70	76	75	72	74	77	75	74	68	76	78	80	74	78	78	67	57	63	70	73	77	67	61	68	72	76	..	73.3
	Minimum	55	57	70	70	60	55	50	50	50	50	51	68	48	48	60	64	57	55	67	49	43	36	40	45	46	50	43	41	44	47	..	52.3
Anchorage	Maximum	81	84	84	81	74	72	74	77	82	83	74	74	71	81	71	71	63	73	59	61	59	68	74	79	82	67	67	75	77	80	..	73.9
	Minimum	51	56	66	65	56	45	49	47	49	50	53	55	42	74	61	61	43	44	45	43	34	32	35	42	47	48	35	35	42	41	..	48.2
Bardstown	Maximum	88	87	91	85	72	74	76	79	87	88	74	76	73	86	77	76	67	76	62	65	63	73	80	83	86	77	72	79	80	87	..	78.0
	Minimum	51	55	65	58	51	50	48	46	47	50	53	45	42	41	60	50	49	50	46	34	31	31	35	40	43	40	42	42	40	40	..	45.8
Bowling Green §§	Maximum	87	89	91	85	66	75	80	81	85	89	87	79	77	90	88	84	74	80	65	65	67	71	80	83	87	74	71	75	83	87	..	79.8
	Minimum	55	57	57	66	60	53	50	52	50	52	52	53	48	48	48	60	52	51	51	47	88	37	37	37	45	47	45	42	42	45	..	49.2
Edmonton	Maximum	..	88	..	..	71	81	80	80	80	83	81	82	83	79	88	87	85	68	79	65	62	65	78	80	82	63	75	74	81	83	..	^{c}77.9
	Minimum	..	53	..	..	54	53	54	52	47	48	47	51	45	49	56	55	57	43	42	47	36	32	35	42	42	58	35	44	47	42	..	^{c}46.9
Eubank §§	Maximum	89	85	87	86	71	71	68	75	78	80	76	75	71	80	80	82	63	73	77	62	60	68	72	78	80	67	64	73	79	83	..	75.1
	Minimum	50	54	56	64	65	53	51	50	45	47	48	47	41	41	58	63	52	54	50	46	35	31	34	40	42	52	41	33	43	42	..	47.6
Frankfort	Maximum	79	86	82	85	83	70	71	76	79	81	80	73	70	79	78	75	70	74	73	62	59	63	70	75	78	69	65	72	74	78	..	74.3
	Minimum	53	55	67	68	59	54	50	48	51	54	56	62	47	50	62	64	52	54	51	47	40	36	39	42	47	58	38	37	44	43	..	50.9
Franklin	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Greensburg	Maximum	81	87	87	84	73	70	73	75	80	82	77	75	73	80	83	83	67	75	70	61	62	65	73	73	82	65	66	70	73	80	..	74.8
	Minimum	52	53	65	65	67	51	48	47	45	47	50	61	42	43	55	63	50	53	50	46	35	30	34	39	40	57	39	32	36	41	..	47.9
Irvington	Maximum	79	84	82	78	72	69	71	75	78	80	77	72	69	79	75	70	65	74	67	59	60	63	71	76	78	75	64	71	75	77	..	72.8
	Minimum	55	58	54	67	57	56	52	52	52	55	53	62	47	50	68	60	47	47	50	47	38	37	42	45	48	55	43	40	47	46	..	51.0
Junction City	Maximum	83	87	88	87	81	70	73	78	83	84	80	76	75	85	84	85	76	75	73	68	61	66	74	80	85	81	69	77	79	84	..	78.2
	Minimum	49	50	67	65	57	50	49	46	45	47	48	59	41	43	58	58	50	54	44	41	41	30	33	38	43	57	37	32	41	41	..	47.1
Leitchfield	Maximum	83	85	83	82	65	70	73	75	80	81	74	73	70	81	78	74	67	75	60	55	60	64	72	75	80	71	65	71	76	79	..	73.2
	Minimum	53	61	63	65	57	50	50	50	51	55	55	64	45	46	61	63	47	48	50	45	38	35	38	43	44	55	41	37	43	44	..	49.9
Lexington	Maximum	78	84	81	83	70	66	68	73	78	78	73	70	67	80	76	74	57	71	63	56	56	63	71	77	79	69	63	72	73	78	..	71.6
	Minimum	60	69	65	66	55	51	52	54	61	62	59	54	50	55	64	54	49	54	46	44	40	43	47	53	57	46	40	51	52	52	..	53.2
Loretto	Maximum	83	88	88	85	73	75	78	80	84	72	75	82	81	77	70	71	75	80	76	74	76	74	74	80	82	85	78	79	80	83	..	78.6
	Minimum	50	50	70	60	55	58	48	50	50	48	45	60	50	45	46	50	52	60	45	51	48	44	41	41	52	60	43	40	45	45	..	50.1
Louisville	Maximum	81	82	82	79	66	71	73	77	83	82	74	71	70	80	72	69	64	73	58	58	58	65	72	78	81	67	67	73	75	78	..	72.6
	Minimum	59	62	67	66	57	52	55	56	57	60	61	56	50	55	63	51	47	50	47	45	43	42	46	48	52	48	42	42	54	50	..	52.8
Do. (Cherokee Park)	Maximum	77	80	79	79	74	69	71	74	77	78	73	71	68	77	71	69	69	73	70	57	56	62	69	73	77	72	63	70	72	76	..	71.5
	Minimum	54	54	66	66	56	49	51	52	51	54	55	58	46	49	51	62	45	47	48	45	39	36	39	42	46	56	37	39	44	43	..	49.3
St. John §§	Maximum	80	85	84	80	62	70	73	75	81	82	74	75	71	83	75	74	61	76	57	62	61	65	74	79	82	61	66	75	79	82	..	73.5
	Minimum	52	57	61	64	58	50	49	50	51	53	54	55	44	49	51	62	47	47	51	45	35	34	38	39	44	45	39	36	38	43	..	48.0
Scott	Maximum	83	82	82	80	72	69	72	76	84	79	69	70	70	80	71	67	66	70	66	60	57	66	71	78	79	70	64	74	71	76	..	72.5
	Minimum	50	53	65	61	56	49	48	50	50	55	55	59	45	49	62	60	40	46	45	44	41	34	38	42	46	51	34	40	46	43	..	48.7
Shelbyville	Maximum	82	86	85	83	71	72	75	78	83	85	77	73	72	81	76	74	66	74	70	62	60	68	75	80	83	74	69	77	79	81	..	75.7
	Minimum	51	51	52	65	55	46	45	46	48	50	56	59	41	46	60	61	48	49	47	44	35	32	36	40	44	56	39	34	43	41	..	47.3
Taylorsville	Maximum	77	84	84	83	72	69	75	78	78	71	73	72	70	79	73	73	68	74	63	58	58	63	71	75	79	67	65	73	74	79	..	72.6
	Minimum	52	54	67	67	58	50	45	47	49	49	52	59	42	46	59	62	50	51	49	46	36	31	34	37	41	57	36	32	40	39	..	47.9
Williamstown §§	Maximum	84	84	87	82	71	73	75	79	82	85	72	72	73	83	73	72	62	72	70	60	60	70	76	82	84	82	72	78	79	82	..	75.9
	Minimum	55	55	55	65	57	49	49	52	55	57	58	57	45	45	52	63	50	50	45	45	40	40	40	44	49	54	42	42	44	49	..	50.1
Eastern Division.																																	
Beattyville	Maximum	85	89	90	90	82	72	75	77	80	84	82	78	76	84	88	87	78	78	83	65	61	67	76	81	85	82	70	77	84	85	..	79.7
	Minimum	54	52	66	65	60	53	48	52	48	50	52	60	46	50	53	60	54	56	49	48	39	36	36	42	45	50	36	36	41	43	..	49.3
Berea	Maximum	..	..	..	85	78	68	68	74	79	81	77	76	78	84	84	83	79	74	78	63	59	74	72	75	83	76	67	71	80	84	..	^{c}75.9
	Minimum	..	..	..	57	47	53	48	44	46	48	51	58	42	49	62	62	57	54	51	43	34	32	34	47	45	56	37	30	46	48	..	^{c}47.7
Farmers	Maximum	78	87	86	87	83	70	79	83	78	84	78	77	73	82	85	82	78	75	75	63	62	67	75	79	82	67	70	77	77	83	..	77.4
	Minimum	51	48	67	62	59	50	45	43	47	49	51	60	43	44	53	61	53	54	47	42	37	33	32	35	40	51	41	35	35	37	..	46.8
Harlan	Maximum	83	86	85	86	74	65	65	75	78	82	80	76	74	82	84	85	72	76	82	80	68	66	72	76	79	66	68	75	78	81	..	76.6
	Minimum	65	57	63	65	60	50	51	58	54	52	52	58	51	51	54	60	60	58	49	47	41	40	42	45	49	53	56	43	49	50	..	52.8
Maysville §§	Maximum	83	87	85	89	65	73	75	80	83	84	76	77	71	83	82	78	73	76	74	63	62	67	75	80	83	70	69	78	77	83	..	76.7
	Minimum	54	53	67	64	62	50	52	49	51	54	54	62	43	43	57	62	53	53	46	46	42	38	39	42	46	55	45	43	42	47	..	50.5
Mount Sterling §§	Maximum	80	87	85	87	65	68	70	75	80	82	78	75	70	80	81	83	69	73	80	68	63	69	72	79	70	73	81	75	74	77	..	75.6
	Minimum	51	51	51	60	58	51	47	47	47	48	50	54	43	43	56	56	56	51	54	41	42	34	37	42	49	51	36	35	45	44	..	47.7
Richmond §§	Maximum	83	86	86	87	73	72	70	78	81	84	72	75	72	82	83	83	65	74	72	60	61	66	74	80	82	65	70	75	79	83	..	75.8
	Minimum	56	57	68	68	65	52	50	49	49	53	54	55	47	47	51	63	51	51	52	46	43	37	37	40	46	50	39	38	38	48	..	50.0
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	83	86	86	87	82	70	73	77	79	81	82	80	74	82	86	86	78	78	81	60	61	67	78	81	86	74	68	71	79	79	..	77.8
	Minimum	60	58	63	66	60	57	50	60	53	50	53	62	47	48	54	64	50	57	52	49	37	38	40	43	42	43	37	40	42	45	..	50.7

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Inches
Edmonton
Calgary
Medicine Hat
Qu'Appelle
Swift Current
Portland
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1
2
4
6

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

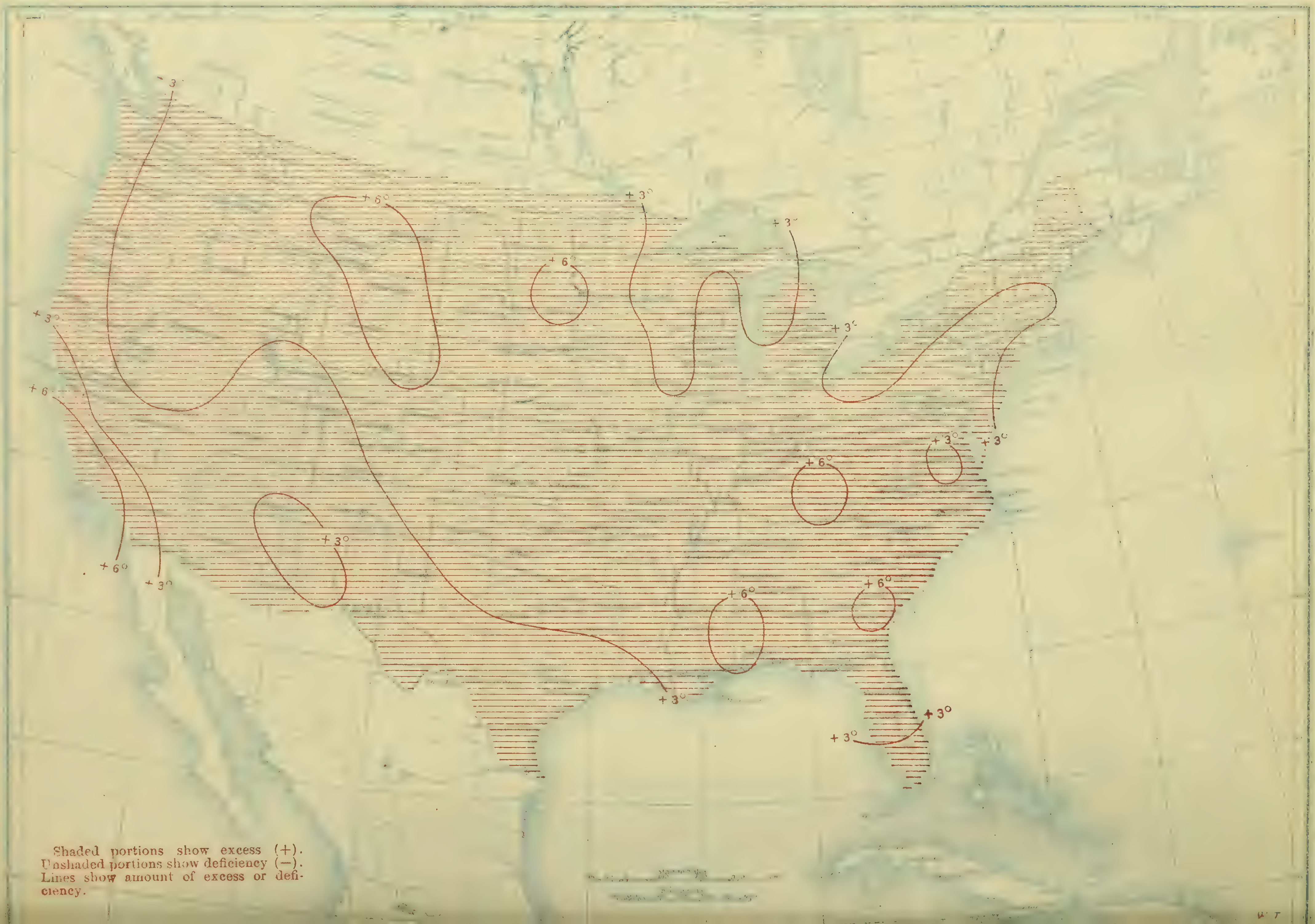
KENTUCKY SECTION

OCTOBER, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 22, 1918

Departure of the Mean Temperature from the Normal, October, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIII. LOUISVILLE, KY., OCTOBER, 1918. No. 10

GENERAL SUMMARY.

Exceptionally favorable weather conditions prevailed during October, counterbalancing to a considerable extent the ill effects of the unseasonably low temperature of the previous month. Temperatures were above normal on nearly every day, while the mean temperature for the month was the third highest for October during the 30 years of State records.

Precipitation was considerably above normal. Most of it occurred during the latter half of the month, however, and therefore retarded farm operations but little except hindering somewhat the curing of tobacco.

No frost of consequence occurred. Late corn and tobacco matured and were harvested in good time. Corn was greatly improved by the October weather—the quality of the early crop through the dryness of the first half of the month, and the later portion of the crop through the prolongation of the growing season allowing it to fully mature—these features being of great importance on account of the shortage in this crop. Gardens continued to produce vegetables from late plantings until the end of the month; while marked improvement occurred in late potatoes on account of the extended period of growth. Seeding of winter wheat progressed rapidly, with indications of a larger acreage than in 1917, and the abundant moisture and warmth caused prompt germination and vigorous growth. Considered in all its phases, and in spite of the labor shortage, the farming situation was fairly satisfactory at the end of this month.

PRESSURE.

Weather conditions over this section during the month were influenced or controlled by seven distinct high pressure and six distinct low pressure formations,—high pressure areas largely predominating during the first two decades and low areas during the last decade. High pressure periods covered the 1st-4th, 7-10th, 14-19th (a. m.), 20th (p. m)-22, and the 31st. Low pressure formations prevailed during the 5-6th, 11-13th (a. m.), 19 (p.m)-20th (a. m.), 23d-25th (a. m.), 26-28th, and 29-30th. The most important disturbance of the month was the storm that was centered over Texas the morning of the 26th, and which with greatly increased energy and extended area moved to the Lake Superior section by the morning of the 28th, attended by rains and high winds, and closely followed by a reaction downward in temperature to a more normal condition.

The mean sea-level pressure, computed from the records of two stations, was 30.10 inches. The extremes were 30.40 inches at Louisville on the 4th, and 29.55 inches at Lexington on the 28th.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 62.3°, which is 4.5° above normal for October, and practically the same monthly mean as for September preceding. Maximum temperatures in the 80's were frequent until after the middle of the month, while minimum temperatures were generally above 40° and remarkably uniform throughout the month. The extremes were 91° at Earlington on the 5th and Hopkinsville on the 6th, and 32° at Greensburg and Taylorsville on the 15th.

PRECIPITATION.

The average precipitation for the State, based on the reports of 50 stations, was 3.81 inches, which is 1.31 inches in excess of normal. Showers occurred on the 11-12th, and general rain in the period 18-20th; while showers were of almost daily occurrence from the 23d to the 31st, with thunderstorms on several days. Precipitation was well distributed over the State. It was lightest—between 2 and 3 inches—along the Ohio, and heaviest—over 6 inches—in the southeast mountain section. Over most of the State monthly amounts were generally between 3 and 4 inches. At the various stations monthly totals ranged between 1.91 inches at Henderson and 6.91 inches at Harlan.

WIND.

The total wind movement at Louisville was 7,612 miles, and at Lexington 9,479 miles, with average hourly velocities of 10.2 and 12.7 miles, respectively. The maximum velocity for five minutes was at the rate of 40 miles per hour on the 27th at both Louisville and Lexington, being from the southeast at Louisville and from the south at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 78 per cent, at 12 noon 54 per cent, and at 7 p. m. 62 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 63 and at Lexington 37.

MISCELLANEOUS.

Rivers.—Pool stages prevailed generally in the rivers of the State and the Ohio until the 31st. The rains of the 30th, falling on saturated soil, afforded considerable run-off and produced a sharp rise on the 31st, the only one of consequence during the month.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.		
	Monthly average	Departure from 30-year normal.	Highest	Lowest.	Monthly average	Departure from 30-year normal	No. of days with .01 in or more.
1889	52.0	−5.8	89	23	2.42	−0.08	
1890	55.7	−2.1	87	23	2.94	+0.44	
1891	51.8	−3.0	92	21	0.78	−1.72	
1892	57.3	−0.5	97	19	0.51	−1.99	
1893	56.4	−1.4	90	19	4.00	+1.50	
1894	58.6	+0.8	92	25	1.36	−1.14	5
1895	52.2	−5.6	89	14	1.24	−1.26	4
1896	55.8	−2.0	90	25	1.71	−0.79	5
1897	63.2	+5.4	96	26	1.10	−1.40	4
1898	57.1	−0.7	93	21	4.19	+1.69	10
1899	61.3	+3.5	93	26	2.42	−0.08	5
1900	64.5	+6.7	94	29	2.29	−0.21	5
1901	58.1	+0.3	93	25	1.57	−0.93	4
1902	60.1	+2.3	91	25	2.34	−0.16	5
1903	57.7	−0.1	96	19	2.22	−0.28	5
1904	57.2	−0.6	93	20	0.52	−1.98	2
1905	57.0	−0.8	90	25	4.95	+2.45	9
1906	56.9	−0.9	91	20	1.51	−0.99	7
1907	55.5	−2.3	83	20	2.97	+0.47	6
1908	57.1	−0.7	92	20	0.71	−1.79	3
1909	55.2	−2.6	94	18	2.11	−0.39	6
1910	61.4	+3.6	96	17	4.45	+1.95	6
1911	59.9	+2.1	94	27	3.71	+1.21	10
1912	59.5	+1.7	92	25	1.42	−1.08	4
1913	56.9	−0.9	97	23	3.55	+1.05	9
1914	59.7	+1.9	91	22	5.10	+2.60	9
1915	60.6	+2.8	90	27	3.40	+0.90	6
1916	57.6	−0.2	97	24	2.59	+0.09	6
1917	51.1	−6.7	90	20	3.18	+0.68	7
1918	62.3	+4.5	91	32	3.81	+1.31	10

Climatological data for October, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	63.6	+ 6.2	90	5	35	15	47	3.25	+0.81	1.38	0	10	17	9	5	e.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	62.4	+ 4.3	85	5	40	31	26	1.14	+4.14	1.52	0	8	9	8	14	se.	E. W. Horr.
Calhoun	McLean	437	14	63.0	+ 3.7	88	5	38	31	39	3.40	+0.12	1.13	0	10	7	13	11	se.	W. A. Taylor.
Earlington	Hopkins	420	27	64.6	+ 5.3	91	5	37	15†	44	2.62	+0.05	0.88	0	10	19	0	12	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	^{a}63.8	......	89^{a}	5	36^{a}	31	43^{a}	4.88	......	2.08	0	7	16^{a}	9^{a}	5^{a}	w.	C. R. Lovell.
Henderson	Henderson	327	9	......							1.91	−1.19	0.65	0	6	......				W. W. Shelby.
Hopkinsville	Christian	524	21	64.6	+ 4.2	91	6	36	31	42	3.36	+0.49	0.87	0	7	11	4	16	s.	W. E. Graves.
Marion	Crittenden	571	19	......							......									B. C. Paris.
Mayfield	Graves	364	8	61.8	+ 3.3	89	6	39	15	36	2.77	+0.22	0.90	0	8	6	16	9	s.	J. N. Davis.
Owensboro	Daviess	479	21	63.0	+ 4.0	86	5	37	31	34	3.02	−0.08	0.65	0	10	16	5	10	se.	Henry S. Berry.
Paducah	McCracken	341	18	64.2	+ 3.2	88	4†	39	31	40	3.37	+0.64	1.07	0	12	19	0	12	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{a}62.9	+ 4.1	87^{a}	5	35^{a}	31	36^{b}	3.38	+1.28	1.20	0	7	16^{c}	0^{c}	12^{c}	n.	Ray Baker.
Russellville	Logan	590	6	......							......									E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	63.6	+ 4.1	83	6	38	15	32	6.48	+4.05	1.45	0	9	12	3	16	s.	W. W. Hicks.
Anchorage	Jefferson	700	17	60.5	+ 4.0	88	5	35	14	42	2.99	+0.13	1.01	0	7	22	0	9	sw.	C. E. Barret.
Bardstown	Nelson	637	21	63.3	+ 3.8	90	4†	36	15	49	3.57	+1.17	0.80	0	7	17	4	10	e.	Chas. M. Talbott.
Bowling Green	Warren	500	27	64.7	+ 5.5	91	5	40	16†	42	4.01	+1.64	1.10	0	10	13	8	10	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	......							4.61	......	1.33	0	13	......				James H. Young.
Burnside	Pulaski	773	25	......							5.68	+3.38	1.35	0	8	......				C. L. Hurt.
Carrollton	Carroll	492	18	......							2.46	+0.19	0.77	0	9	......				Charlie Oliver.
Cloverport	Breckenridge	375	4	......							3.38	......	1.09	0	12	......				W. A. Cockerill.
Edmonton	Metcalfe	600	24	......							......									P. W. Ray.
Eubank	Pulaski	1177	23	60.2	+ 3.5	84	5†	31	15	42	4.94	+2.80	1.02	0	11	11	12	8	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	62.0	+ 5.5	86	5	36	15	37	3.76	+1.81	1.40	0	10	11	6	14	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	^{c}63.5	+ 4.2	88^{c}	4†	38^{c}	15	41^{c}	3.70	+1.60	0.82	0	12	13^{c}	6^{c}	9^{c}	s.	V. P. Atkinson.
Greensburg	Green	581	25	61.3	+ 4.8	86	6	32	15	43	5.51	+2.75	1.00	0	15	10	3	18	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	......							3.83	+1.36	1.44	0	10	......				Miss Lulu Wood.
Irvington	Breckenridge	646	20	62.8	+ 7.2	86	5	41	31	32	2.91	+0.16	0.68	0	9	16	3	12	s.	W. J. Piggott.
Junction City	Boyle	985	24	61.8	+ 4.3	88	5	34	15	43	4.09	+2.10	1.10	0	13	13	10	8	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	^{b}62.0	+ 3.9	86^{b}	5	38^{b}	15†	37	4.28	+1.85	1.25	0	11	14	6	11	s.	John E. Stone.
Lexington	Fayette	989	30	61.1	+ 4.6	84	5	38	31	35	4.57	+2.35	2.22	0	12	6	11	14	sw.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	^{f}63.3	+ 5.0	80^{f}	6†	33^{f}	31	27^{f}	3.44	+1.00	0.97	0	7	......				Loretto Academy.
LOUISVILLE	Jefferson	525	45	61.7	+ 3.3	86	5	41	31	30	2.62	−0.01	1.25	0	10	9	9	13	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	8	60.2	− 3.0	84	5	36	29	34	2.66	−0.76	0.98	0	9	14	8	9	s.	Wm. I. Hunt.
St. John	Hardin	777	21	61.2	+ 3.6	87	5	35	29	36	3.45	+0.96	0.83	0	12	20	4	7	......	Sisters of Loretto.
Scott¶	Kenton	900	20	60.5	+ 2.7	85	5	38	15	36	3.95	+1.61	1.19	0	9	9	10	12	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	61.4	+ 4.7	88	5	37	14	44	3.25	+0.83	0.70	0	11	14	8	9	w.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	60.0	+ 4.0	86	5	32	15	43	3.90	+1.35	1.07	0	11	13	5	13	se.	E. D. Bourne.
Williamstown	Grant	943	15	63.0	+ 6.0	87	5	38	14	39	2.95	+0.07	0.62	0	11	11	10	10	......	Miss Rose Carter.
Woodbury	Butler	533	0	......							4.17	......	1.42	0	12	......				Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	63.3	+ 6.2	89	5†	33	15	53	3.23	+0.07	1.25	0	11	9	7	15	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16	......							......									H. E. Way.
Catlettsburg‡	Boyd	534	29	......							3.43	+0.76	0.89	0	11	......				Forester Farley.
Cynthiana	Harrison	684	0	......							3.35	......	1.20	0	6	......				P. H. Kehoe.
Falmouth	Pendleton	600	29	......							2.77	+0.33	0.83	0	9	10	9	12	e.	J. V. Oldham.
Farmers	Rowan	668	10	61.5	+ 4.9	89	5	34	15	46	3.64	+0.34	1.00	0	7	21	2	8	w.	Durwood Cassity.
Harlan	Harlan	1197	0	62.6	......	84	1†	37	16	46	6.91	......	2.33	0	10	13	7	11	s.	Will Ward Duffield.
Jackson	Breathitt	776	6	......							......									Jas. L. McCoy.
London	Laurel	1190	3	......							4.54	......	1.13	0	8	......				C. R. Lee.
Louisa	Lawrence	584	14	......							3.97	+1.09	1.09	0	10	......				Miss Carrie S. Adams.
Maysville	Mason	524	20	62.3	+ 5.2	89	5	35	22	41	3.01	+0.49	1.14	0	9	16	8	7	w.	J. C. Armstrong.
Middlesboro	Bell	1128	21	......							......									B. H. Perkins.
Mount Sterling	Montgomery	930	28	60.7	+ 5.9	87	5	35	15	41	3.42	+1.02	0.90	0	11	15	7	9	w.	W. R. McKee.
Pikeville	Pike	634	12	......							......									I. M. Williams.
Richmond	Madison	926	24	63.2	+ 4.8	87	5	38	15	38	4.03	+1.78	0.90	0	8	11	8	12	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	60.7	......	83	15	35	23	41	6.46	......	1.48	0	7	14	6	10	......	O. A. Lund.
Williamsburg	Whitley	939	20	62.2	− 2.7	85	2	35	15†	46	4.68	+2.13	0.90	0	9	14	7	10	s.	N. C. Jones.
State averages and extremes				62.3	......	91	5†	32	15	53	3.81	......	2.33	0	10	13	7	11	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for October, 1918.

Stations.		Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G											1.38							[illegible]	[illegible]	.14				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
Blandville	M											1.39	.08						.05	1.52	.07			[illegible]	.37	T.	[illegible]	[illegible]			T		[illegible]
Calhoun	G											.48	.15						T.	1.13	.16			[illegible]	[illegible]	[illegible]		[illegible]			.15	[illegible]	3.10
Earlington	G											.88							.48	.20	.10			[illegible]	.37	.12		[illegible]			[illegible]	[illegible]	[illegible]
Greenville	G											.68							2.08	.96	.15				.46			[illegible]			[illegible]		[illegible]
Henderson	O												.32								[illegible]			.05	.55	T.			[illegible]		[illegible]		[illegible]
Hopkinsville	C											.53	.26					T.	.87	[illegible]	.15				[illegible]	[illegible]		[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
Marion	O																																
Mayfield	M											.90	.12							.55	.25			.05	[illegible]				.15		.40		2.77
Owensboro	O											.55	.11							.65	.21			.15	[illegible]			[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
Paducah	O									.05		1.07	.06						.06	.67	[illegible]	[illegible]	[illegible]	.05	.64			[illegible]			[illegible]		[illegible]
Princeton	G												1.20						T.	1.20	.25				[illegible]			[illegible]	[illegible]		[illegible]		[illegible]
Russellville	G																																
Central Division.																																	
Alpha	C											T.	.50					1.45	.73	.90	.10				.70	T				1.45	[illegible]	.20	6.48
Anchorage	O									T.		T								1.01	.39			.16	.37	.03			[illegible]		[illegible]	T.	[illegible]
Bardstown	S												.80							.55	.50				[illegible]	[illegible]			[illegible]		.50		[illegible]
Bowling Green	G												1.10					.03	1.10	.35	.18			T.	[illegible]	.02			.28	T.	.15	[illegible]	4.01
Brownsville ‡	G												1.33						.63	.34	.58	.02		.02	.60	.27	[illegible]	.01	.33		.14	.30	4.61
Burnside	C												.70						1.10	.20	.80					[illegible]			.50		[illegible]	.63	[illegible]
Carrollton	O						.12						.42								.77				.11	.33	[illegible]	.03	.38			[illegible]	2.46
Cloverport	O												.36							.01	1.09	.05		.16	.60	.50	.03	[illegible]	.34		.07	.13	[illegible]
Edmonton	G																																
Eubank	C											T.	.12					*	.65	.30	.80				[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Frankfort	K												.11								1.40	.02			.16	[illegible]	.36	.06	.76		[illegible]	.33	3.76
Franklin	G											.36	.14						.82	.17	.32				.35	.03	.32	.03	.51		.64	.01	3.70
Greensburg	G											.25	.43						.47	.93	.49	[illegible]		.37	.46	.36	.03	.05	1.00	.04	.34	.26	5.51
High Bridge	K												.11								1.41	.03			.32	.19	.30	.10	.75		.12	.47	3.83
Irvington	O									T.		.11								.68	.33			.64	.47	.03		T.	.33		.23	.09	2.91
Junction City	K											.07	.37						.07	.32	.78	.04			.40	.25	[illegible]		1.10	[illegible]	.47	.23	4.09
Leitchfield	G											.75	.16						.07	.70	.27			.40	.55	.05				*	1.25	.08	4.28
Lexington ***	K											.06	.28							.81	1.42			.06	.15	.38	.03	.01	.90	T.	.41	.06	4.57
Loretto	S											.45								.56	.59			.20	.55	.12					.97		3.44
LOUISVILLE***	O									T.		.04	.03							.95	.31			.28	.33	.01	T	.50	.04		.13	T	2.62
Do. (Cherokee Park)	O									T.		.03								.98	.36			.22	.34			.10	.42		.13	.08	2.66
St. John	S											.22	.40						.01	.40	.52			.44	.41	.08	.01	.10			.83	.03	3.45
Scott	L						.03					T	1.19							.18	.72			T	.66	T.		.05	.78		.20	.14	3.95
Shelbyville	S											.06	.21							.70	.48			.06	.57	.06		.08	.56		.36	.08	3.25
Taylorsville	S									T.		.10	.08							.83	1.07			.07	.48	.08		.04	.62		.44	.09	3.90
Williamstown	L						.08						.17							.35	.62	.03			.57	.05	.20	.02	.62		.24		2.95
Woodbury	G												1.42						.98	.13	.20	.02			.22	.23	.06	.06	.39		.33	.13	4.17
Eastern Division.																																	
Beattyville ‖	K						T.						.06	.07					T		.32	.07				.11	.02	.04	.46	.05	1.25	.75	3.23
Berea	K																																
Catlettsburg ‖	B			.02			.10						.51								.57	.04				.27	.15		.18	.20	.50	.89	3.43
Cynthiana	L					T.															1.20					.25	.20		1.15		.30	.25	3.35
Falmouth	L						T.						.26								.83	T.			.10	.18	.20	.06	.83		.15	.16	2.77
Farmers	L												.24								.98	.05				.32	.45		.60		1.00		3.64
Harlan	K												.25						.41		1.60	.07			.40	.49			.55	.73	2.33	.08	6.91
Jackson	K																																
London ‖	C												.15						.55	.11	1.13	.20							.50		1.10	.80	4.54
Louisa	B												.46	.02							.62	.16				.26	.37		.20	.07	.62	1.09	3.97
Maysville ‖	O												.36								.81	.03			T.	.15	.04	.07	1.14		.07	.34	3.01
Middlesboro	C																																
Mount Sterling	L												.18	.02						T.	.90	.06		T.	.10	.35	.03	[illegible]	.80	.02	.90		3.42
Pikeville ‖	B																																
Richmond	K											T.	.38							.12	.90				.18	.50			.70	T.	.68	.57	4.03
Weeksbury	B												.90						1.15		.80						.65		.60	1.48	.88		6.46
Williamsburg ‖	C												T.	.08					.85	.15	.90	.35			T.	.45			.45		.70	.75	4.68

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

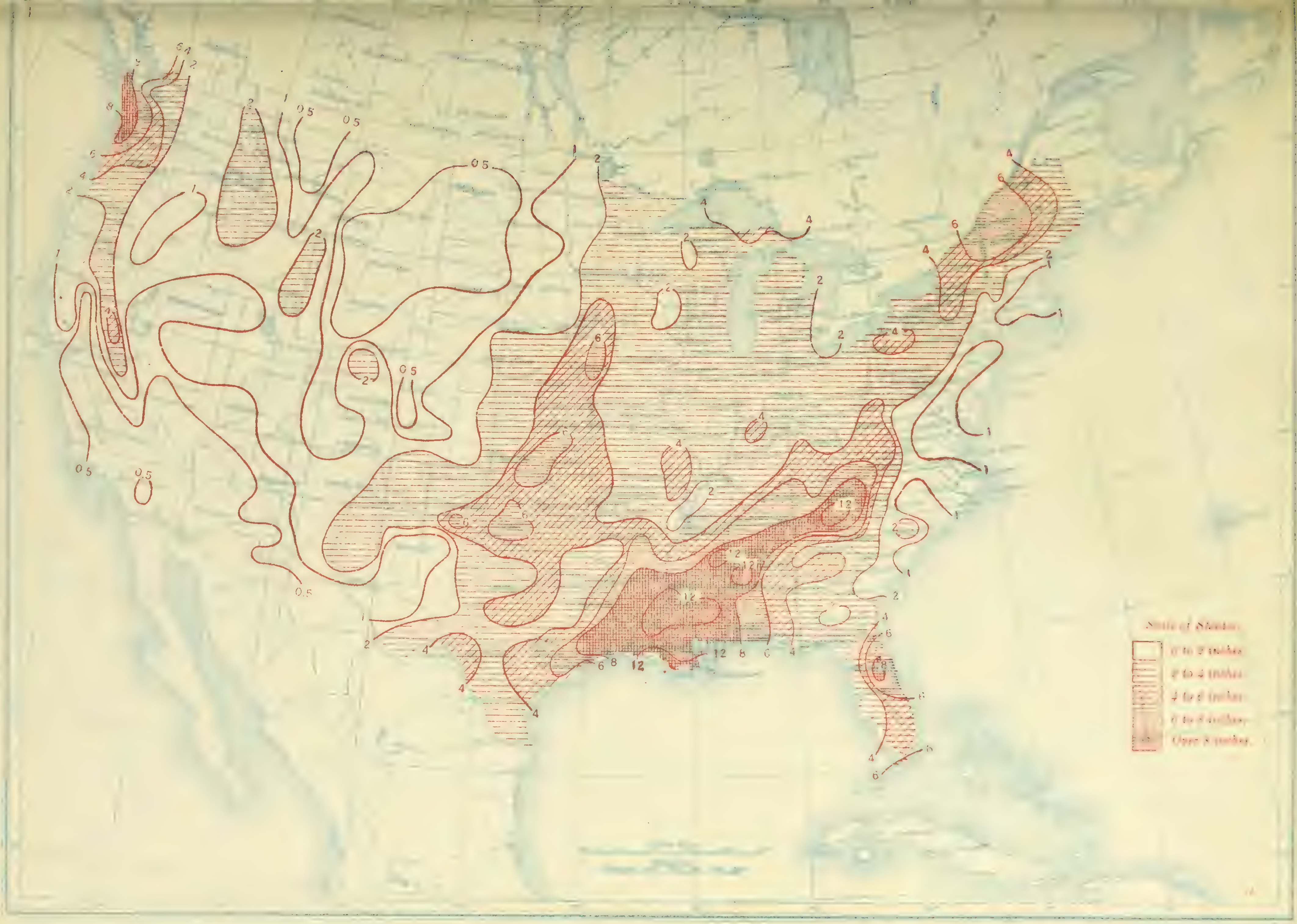
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for October, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	85	88	88	88	90	88	72	81	86	85	77	78	80	70	79	80	84	70	73	68	72	78	70	68	70	80	81	78	64	68	54	77.2
	Minimum	45	51	41	43	58	68	44	43	49	47	51	58	51	39	35	38	44	50	56	58	40	65	60	57	55	65	64	46	40	52	38	50.0
Blandville	Maximum	76	82	75	82	85	85	71	73	76	77	68	66	75	65	71	73	76	71	69	66	68	70	64	67	64	75	73	61	66	62	53	71.1
	Minimum	50	58	59	57	62	66	51	47	57	57	56	57	54	45	45	52	58	61	56	60	48	49	59	59	56	58	50	43	45	49	40	53.7
Calhoun	Maximum	81	86	80	85	88	86	80	79	80	83	76	72	78	69	78	80	81	71	71	68	70	74	70	67	66	79	76	66	63	66	53	74.9
	Minimum	49	56	55	48	59	66	45	44	51	50	55	61	51	43	39	43	48	57	52	59	44	43	57	56	56	57	65	45	42	52	38	51.2
Earlington	Maximum	86	90	85	90	91	89	75	84	85	86	77	77	81	71	81	83	87	69	78	68	76	78	71	69	67	82	77	67	65	68	53	77.6
	Minimum	49	56	55	48	61	69	47	45	53	50	55	63	53	41	37	43	49	61	55	61	43	42	60	57	58	58	60	46	42	49	37	51.7
Greenville	Maximum	84	87	82	..	89	89	76	80	84	86	74	77	80	74	78	78	81	70	76	75	71	77	71	71	71	83	78	71	67	66	55	ᵃ76.7
	Minimum	47	55	55	..	46	68	46	44	51	48	54	61	52	45	37	42	46	59	54	59	44	45	60	56	58	58	65	45	38	52	36	a50.9
Hopkinsville	Maximum	86	87	83	89	90	91	88	81	83	86	76	77	82	76	78	80	78	87	76	67	74	72	67	68	67	81	77	66	62	66	56	77.3
	Minimum	49	55	54	55	51	62	49	46	48	56	61	64	49	40	39	38	45	58	60	59	51	50	61	55	59	58	60	44	41	54	36	51.8
Marion	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Mayfield §§	Maximum	83	84	79	84	87	89	71	78	81	82	70	67	79	66	75	77	78	68	70	68	70	72	65	66	64	77	74	61	65	61	55	73.1
	Minimum	47	48	56	53	51	63	52	45	46	52	52	58	52	44	39	43	45	57	58	60	46	47	50	58	57	57	59	43	42	45	40	50.5
Owensboro	Maximum	75	84	78	82	86	82	77	75	78	80	78	70	70	66	75	77	85	76	69	68	72	75	69	66	67	79	77	75	63	62	51	73.8
	Minimum	46	52	57	50	57	65	54	47	52	50	56	60	52	46	41	44	55	57	54	60	46	48	56	57	57	58	66	45	42	49	37	52.1
Paducah (Lone Oak)	Maximum	85	86	84	88	88	86	88	78	80	82	78	71	76	74	76	78	80	78	70	71	72	73	68	70	67	66	81	69	68	66	63	76.1
	Minimum	52	46	58	55	64	58	52	46	56	54	55	60	55	44	46	49	48	61	55	62	45	48	59	57	56	55	56	43	45	46	39	52.4
Princeton §§	Maximum	82	..	79	86	87	85	69	79	80	82	66	70	77	66	69	75	81	68	69	66	69	75	68	69	65	78	76	64	66	64	54	a72.8
	Minimum	49	55	..	50	53	75	50	46	58	50	57	60	53	46	39	40	50	60	66	61	44	46	60	57	57	60	69	46	41	55	36	a53.0
Russellville§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	77	80	78	78	82	83	73	77	77	77	78	71	80	73	70	74	76	62	68	61	66	72	70	69	72	75	75	68	64	70	56	72.6
	Minimum	48	67	67	48	59	63	49	43	58	47	65	65	60	45	38	42	45	58	58	58	52	49	57	62	59	57	68	51	54	56	45	54.6
Anchorage	Maximum	72	85	79	83	88	82	63	77	79	82	78	73	77	73	77	79	79	67	65	64	68	72	77	62	67	77	80	72	62	61	52	73.3
	Minimum	47	52	51	51	55	63	48	39	46	48	49	52	49	35	36	37	47	50	49	49	42	41	52	55	53	56	62	40	36	49	39	47.7
Bardstown	Maximum	82	87	83	90	90	90	86	83	86	87	85	75	82	70	82	84	83	72	69	64	70	76	74	68	68	84	79	73	62	60	56	77.4
	Minimum	50	55	54	41	55	70	50	42	41	42	49	63	51	41	36	39	41	53	52	57	45	41	56	56	55	52	64	48	38	46	42	63.3
Bowling Green	Maximum	87	89	85	89	91	90	78	81	83	86	81	83	83	82	80	79	80	68	68	65	80	78	74	70	71	80	78	76	61	70	57	78.2
	Minimum	53	47	58	49	59	65	48	46	45	50	52	54	50	44	41	40	46	60	57	57	46	45	58	57	57	57	66	46	40	55	40	51.2
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	82	82	78	83	84	84	80	78	80	82	81	80	78	65	68	78	80	71	65	62	60	73	68	65	73	74	72	71	62	64	59	73.6
	Minimum	42	53	55	41	53	50	40	42	44	46	43	48	51	39	34	36	38	55	53	55	49	47	44	52	52	54	50	47	41	55	40	46.8
Frankfort	Maximum	76	83	83	79	86	84	77	75	76	77	79	72	76	74	71	76	78	76	66	65	66	70	72	67	67	77	78	76	64	62	58	73.7
	Minimum	52	53	54	42	54	65	51	44	48	41	48	62	52	41	36	39	41	53	52	58	47	44	53	57	55	60	64	49	41	55	44	50.3
Franklin	Maximum	..	..	..	88	88	87	70	80	79	82	75	76	82	71	79	80	79	65	71	64	69	77	70	67	71	78	77	73	60	70	58	ᶜ74.5
	Minimum	..	..	..	60	59	64	48	43	55	48	60	65	56	42	38	42	49	60	57	57	47	46	52	58	58	57	66	46	43	55	40	ᶜ52.5
Greensburg	Maximum	80	84	81	83	81	86	81	78	73	81	82	75	78	75	74	77	76	70	69	67	62	76	75	62	67	78	78	75	63	64	60	74.5
	Minimum	46	51	52	40	53	66	38	40	46	41	47	72	56	38	32	35	38	57	54	56	49	39	56	54	56	54	63	47	39	54	42	48.1
Irvington	Maximum	74	84	77	81	86	82	71	75	75	79	74	72	76	67	71	75	80	72	65	65	66	74	68	65	65	76	76	72	62	65	57	72.5
	Minimum	51	60	57	48	63	69	48	46	53	49	55	63	57	45	43	46	48	58	53	59	45	44	58	57	59	58	68	47	42	57	41	53.1
Junction City	Maximum	82	85	84	87	88	86	73	78	77	82	80	76	78	73	77	80	81	73	67	63	64	74	67	62	73	78	79	72	62	63	54	74.8
	Minimum	46	50	41	52	71	70	45	36	41	40	47	67	48	41	34	37	40	57	52	57	41	39	49	55	56	53	62	48	39	54	43	48.7
Leitchfield	Maximum	78	83	80	83	86	84	77	76	75	81	77	..	..	73	74	77	79	70	68	64	66	75	67	64	66	79	77	73	62	64	54	ᵇ73.5
	Minimum	49	54	54	46	57	68	45	44	50	47	52	..	..	62	38	43	44	58	53	57	44	42	54	55	56	56	64	45	38	50	38	ᵇ50.4
Lexington	Maximum	73	81	74	80	84	80	58	76	76	78	77	68	73	59	73	78	78	64	65	60	63	71	71	63	65	77	76	70	62	58	48	70.3
	Minimum	50	61	58	55	62	49	46	41	56	56	57	58	50	42	44	53	58	51	49	53	46	43	57	58	58	55	63	46	48	48	38	51.9
Loretto	Maximum	..	..	..	..	..	80	74	78	76	78	73	70	78	70	..	78	79	73	68	65	66	75	69	62	66	80	78	73	61	64	60	ᶠ71.8
	Minimum	..	..	..	..	..	64	48	60	60	69	58	61	62	49	..	57	61	54	51	50	50	58	48	50	53	60	69	52	46	48	33	ᶠ54.8
Louisville	Maximum	69	83	76	80	86	81	62	76	77	78	75	71	76	65	74	77	78	66	63	64	68	70	68	62	64	77	77	57	62	62	51	70.8
	Minimum	51	61	58	52	66	51	49	47	55	54	58	60	53	46	47	51	51	55	52	55	47	48	59	56	59	59	53	47	43	48	41	52.6
Do. (Cherokee Park)	Maximum	68	81	76	78	84	80	58	68	71	71	74	71	75	64	71	75	77	73	61	65	66	69	69	63	64	76	78	74	62	62	57	70.5
	Minimum	44	53	55	44	57	66	48	13	49	46	51	61	56	42	39	42	46	53	48	58	43	42	54	55	56	57	62	46	36	53	44	50.0
St. John	Maximum	77	85	78	83	87	86	64	78	75	80	80	73	80	67	74	76	78	71	68	63	66	74	68	63	66	78	83	72	60	65	55	73.3
	Minimum	44	54	47	49	51	57	47	45	49	45	50	50	54	43	41	40	43	57	53	55	43	45	56	56	55	58	63	46	35	54	40	49.2
Scott	Maximum	68	82	76	79	85	79	62	76	77	79	77	69	73	61	71	79	76	67	67	61	63	69	74	67	65	76	76	74	61	62	59	71.3
	Minimum	45	57	55	43	60	60	47	43	43	43	50	56	55	40	38	48	44	53	53	53	44	43	54	56	55	59	63	47	39	53	41	49.7
Shelbyville	Maximum	75	85	81	85	88	84	70	79	80	81	80	72	79	68	77	80	79	72	66	62	69	73	73	61	67	78	78	74	61	61	56	74.1
	Minimum	48	55	52	41	56	65	47	40	47	45	51	60	53	37	38	40	41	52	48	56	44	40	54	54	54	57	62	45	37	52	40	48.7
Taylorsville	Maximum	73	83	76	79	86	83	73	75	74	78	74	72	77	67	71	75	78	70	66	64	63	69	70	63	63	76	78	72	62	62	56	71.9
	Minimum	51	50	50	37	52	68	50	42	44	40	46	63	48	36	32	35	35	52	52	58	45	40	52	57	54	57	64	48	35	55	42	48.1
Williamstown	Maximum	82	85	81	85	87	80	64	80	80	83	83	72	76	66	75	82	82	69	65	62	70	74	74	66	65	78	77	73	65	60	59	74.2
	Minimum	47	59	55	51	64	64	48	41	47	51	55	62	56	40	46	51	50	54	45	56	45	38	54	57	55	59	64	46	46	54	42	51.7
Eastern Division.																																	
Beattyville	Maximum	84	88	83	85	89	89	82	82	81	84	84	77	83	73	80	87	85	77	80	70	67	80	76	74	80	82	85	75	65	61	59	78.9
	Minimum	45	49	52	43	47	55	49	37	42	41	41	61	55	40	33	34	37	54	48	54	48	36	46	53	53	56	73	55	44	56	41	47.7
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	77	87	81	83	89	87	71	79	78	82	82	73	77	70	73	82	82	77	78	68	75	74	78	71	73	80	83	76	65	68	57	76.6
	Minimum	47	50	50	37	46	64	49	39	40	38	42	58	47	37	34	37	39	49	45	55	46	36	46	52	55	55	59	52	40	54	40	46.4
Harlan	Maximum	84	83	81	81	84	84	68	78	77	81	80	69	80	72	70	83	81	65	71	67	70	74	71	70	77	69	79	72	67	64	58	74.5
	Minimum	48	51	54	51	59	55	45	42	42	46	43	60	61	43	42	37	45	50	56	52	55	44	44	58	58	57	66	55	58	57	49	51.1
Maysville	Maximum	80	86	83	82	89	84	75	79	82	80	82	77	77	67	74	80	80	67	70	68	68	73	77	72	68	80	82	77	68	61	58	75.7
	Minimum	50	53	54	45	50	64	50	40	50	44	46	58	51	42	36	39	40	50	45	55	47	35	49	56	57	58	61	52	42	55	42	48.9
Mount Sterling	Maximum	73	85	77	61	87	83	60	78	77	78	82	72	76	72	72	80	81	69	73	63	65	76	75	69	72	78	79	71	65	59	53	72.9
	Minimum	51	53	57	41	51	50	48	39	49	41	41	61	55	39	35	45	41	56	47	54	45	42	51	56	55	56	61	49	42	51	42	48.5
Richmond	Maximum	80	86	76	83	87	87	64	77	76	81	81	74	77	75	79	81	83	75	68	64	65	73	73	66	72	78	79	73	64	61	57	74.6
	Minimum	50	57	60	49	65	55	47	40	56	57	56	62	54	42	38	51	50	58	50	54	44	40	53	56	55	55	62	48	45	53	42	51.7
Weeksbury	Maximum	75	78	77	77	74	82	76	73	79	81	78	82	79	80	83	78	79	71	69	62	72	69	74	71	72	73	76	71	68	65	52	74.1
	Minimum	46	45	46	44	46	49	43	38	48	49	47	51	50	49	52	37	39	46	60	49	36	45	35	65	46	50	59	56	51	44	46	47.3
Williamsburg	Maximum	83	85	80	81	82	83	78	79	80	81	78	76	81	80	81	79	80	78	72	69	71	71	73	72	79	78	80	79	76	61	58	76.9
	Minimum	44	43	45	46	45	48	39	43	46	45	45	61	57	43	35	35	45	42	43	40	51	51	50	51	51	53	57	58	61	56	43	47.5

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

ᵃ, ᵇ, ᶜ, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 2 inches.
2 to 4 inches.
4 to 6 inches.
6 to 8 inches.
Over 8 inches.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

[illegible]
DEC 31 1918

CLIMATOLOGICAL DATA

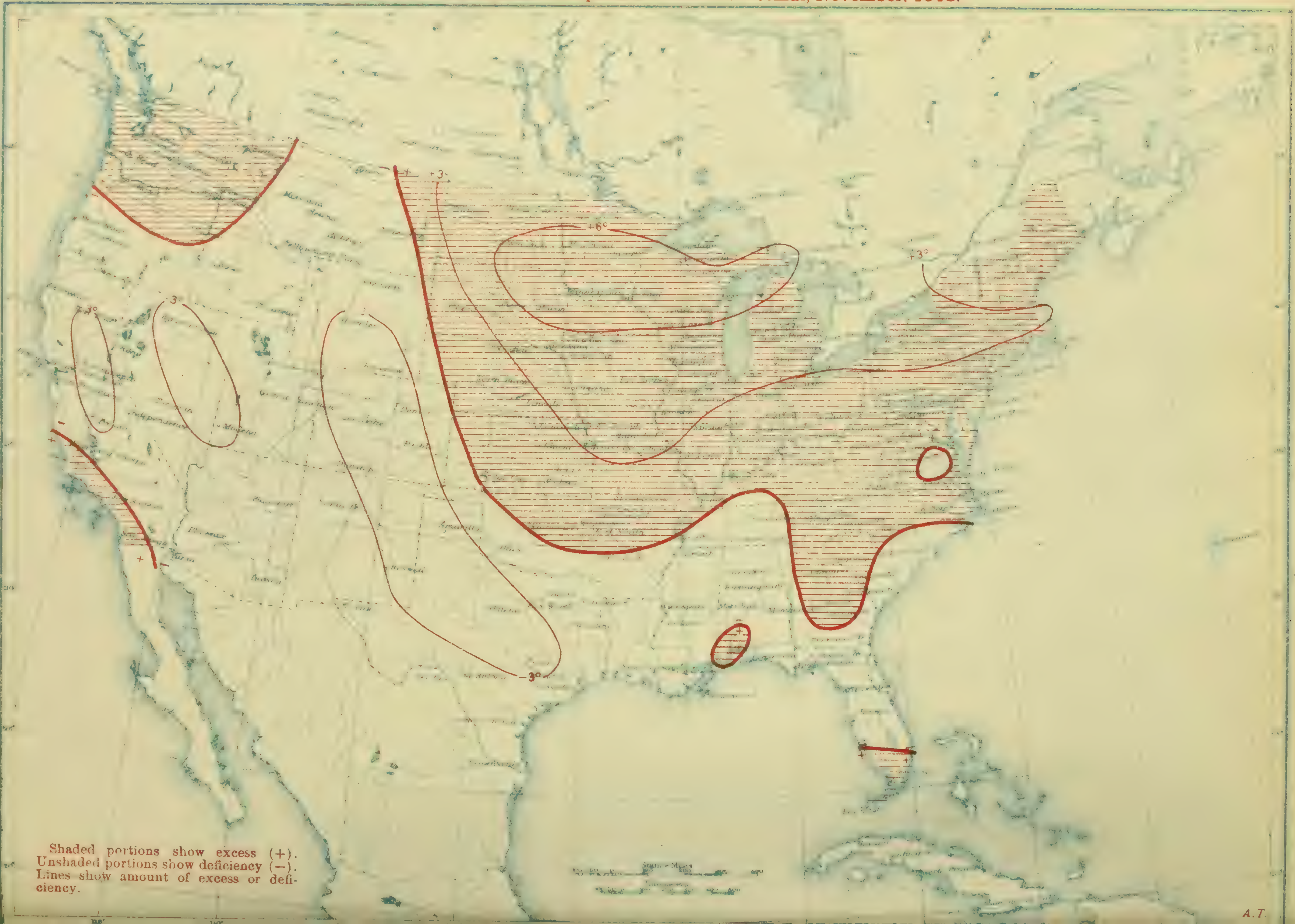
KENTUCKY SECTION

NOVEMBER, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 20, 1918

Departure of the Mean Temperature from the Normal, November, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., November, 1918. No. 11

GENERAL SUMMARY.

Favorable weather conditions, due largely to the light precipitation, prevailed during the month. The dry period during the first half of the month was of special benefit to farmers this year, on account of the shortage of labor and increased wheat acreage sown. For these reasons much of the wheat crop was sown as late as November 1st and some as late as the 11th. The dry weather was also favorable for gathering corn and completing the curing of tobacco, as well as for other fall work; while it was not injurious to vegetation, as the soil contained sufficient moisture to cause germination and keep grain, clover, grass, etc. in good growing condition. In fact the growth of early sown wheat has been somewhat too rapid, occasioning some anxiety lest it become too advanced before winter sets in. No injurious freezes occurred, and there was only a brief period during the last week that was cold enough to check growth. The prospect for wheat and rye is better than usual, while the acreage put in wheat is much larger than usually sown. The excellent quality of the corn which was husked this month was due in large measure to the dry weather.

The first killing frost of the season occurred generally over the State on the 2d, an unusually late date for this section.

PRESSURE.

Only three low pressure formations of importance influenced weather conditions over this section during the month. The first of these moved from Texas northward (west of the Mississippi River) to the upper Mississippi Valley during the 7th; and during the 8-9th its center passed slowly across the Lake region, with its southern edge extending into the Ohio Valley. The second resulted from a trough of low pressure, which the morning of the 16th occupied the west-central States, extending from Manitoba to Texas. This disturbance developed rapidly during the 16th and by the morning of the 17th formed a well defined deep "low," centered in Iowa, and covering practically all of the Mississippi and Ohio valleys and the Lake region. It moved slowly during the 17-18th to the upper Ohio Valley and lower Lake region, and finally to the Atlantic coast on the 20th. The third and most important "low" occupied the central States west of the Mississippi River during the 27th; deepening rapidly, by the morning of the 28th it formed a deep "low" with center in Illinois, from whence it moved rapidly northeastward and at 7 p. m. was centered about Lake Huron. It caused rain and high winds over this section. High pressure areas dominated during the 1st-6th, 10-15th, 21st-26th, and 29-30th.

The mean sea-level pressure, computed from the records of two stations, was 30.14 inches. The extremes were 30.46 inches on the 23d, and 29.43 inches on the 28th, both at Louisville.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 46.1°, which is normal for the month. There was no marked extremes in either direction. Mild and quite uniform temperatures prevailed during the first three weeks, with minima below freezing on only a few days. The last week was cool, minimum temperatures ranging between 20° and 30° on most days. The highest for the month was 77° at Earlington on the 6th, and the lowest 19° at Farmers on the 26th and at Anchorage on the 30th.

PRECIPITATION.

The average precipitation for the State, based on the report of 53 stations, was 1.90 inches, which is 1.45 inches below normal. Light showers occurred on the 9th, and light to moderate rains on the 16-20th, and 28th. Precipitation was fairly well distributed over the State. It was heaviest—ranging between 2 and 4 inches over the east-central counties, and lightest—between 1 and 1.5 inches in the Green River section, along the Ohio from Meade County to Jefferson County, and over the eastern mountain region. At the various stations, amounts ranged between 1.00 inches at Louisa and 3.78 inches at Eubank.

WIND.

The total wind movement at Louisville was 8,389 miles, and at Lexington 9,404 miles, with average hourly velocities of 11.7 and 13.1 miles, respectively. The maximum velocity for five minutes was at the rate of 50 miles per hour at Louisville, and 48 miles per hour at Lexington, from the southwest on the 28th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 78 per cent, at 12 noon 57 per cent, and at 7 p. m. 59 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 53 and at Lexington 42.

MISCELLANEOUS.

Rivers.—In the rivers of the State, including the Ohio, stages declined to comparatively low readings during the first half of the month. The rains of the 16-20th caused a moderate rise after the 16th, and a return to good stages.

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in or more.
1889	43.1	−3.0	85	10	6.04	+2.69	.
1890	48.6	+2.5	81	19	4.87	+1.52	..
1891	43.5	−2.6	75	10	6.04	+2.69	
1892	42.8	−3.3	78	9	3.85	+0.50	..
1893	44.3	−1.8	79	−2	3.12	−0.23	
1894	43.3	−2.8	80	8	1.32	−2.03	4
1895	45.8	−0.3	85	16	4.29	+0.94	7
1896	49.3	+3.2	80	11	5.01	+1.66	8
1897	47.8	+1.7	78	12	4.69	+1.34	10
1898	43.2	−2.9	80	10	2.79	−0.56	8
1899	49.8	+3.7	79	20	2.12	−1.23	8
1900	47.0	+0.9	83	15	7.78	+4.43	8
1901	41.8	−4.3	82	11	1.52	−1.83	4
1902	53.4	+7.3	90	20	4.42	+1.07	11
1903	42.5	−3.6	81	5	3.01	−0.34	8
1904	44.7	−1.4	79	14	0.89	−2.46	3
1905	46.4	+0.3	79	14	3.55	+0.20	7
1906	46.1	0.0	93	11	5.02	+1.67	7
1907	44.2	−1.9	75	15	3.49	+0.14	7
1908	48.6	+2.5	80	8	2.61	−0.74	7
1909	54.7	+8.6	86	19	2.29	−1.06	6
1910	41.1	−5.0	78	11	2.04	−1.31	6
1911	41.6	−4.5	85	9	4.51	+1.16	8
1912	45.2	−0.9	82	10	1.22	−2.13	4
1913	50.5	+4.4	81	8	3.25	−0.10	9
1914	46.9	+0.8	83	5	1.23	−2.12	5
1915	49.8	+3.7	85	16	4.80	+1.45	9
1916	47.8	+1.7	83	8	1.52	−1.83	4
1917	44.3	−1.8	78	11	1.23	−2.12	5
1918	46.1	0.0	77	19	1.90	−1.45	6

Climatological data for November, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	
Western Division.																				
Beaver Dam	Ohio	441	15	47.4	+ 1.1	74	6	24	10†	42	1.45	−1.41	0.58	0	4	18	3	9	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	47.3	+ 0.7	71	6†	27	26†	30	1.64	2.43	1.04	0	6	13	3	14	se.	E. W. Horr.
Calhoun	McLean	437	14	46.8	− 1.6	72	6	24	30	36	1.48	−1.63	0.61	0	6	12	8	10	nw.	W. A. Taylor.
Earlington	Hopkins	420	27	50.2	+ 2.3	77	6	23	30	42	1.55	−2.19	0.60	0	5	17	0	13	n.	Brick Southworth.
Greenville	Muhlenburg	519	1	a47.2	.....	74a	6	21a	30	39a	1.03	......	0.63	0	3	18a	6a	5a	n.	C. R. Lovell.
Henderson	Henderson	327	9	....	....	....	....	....	....	....	1.63	−2.11	0.70	0	5	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	21	47.4	− 0.6	74	4‡	23	30	37	1.79	−2.36	0.70	0	4	10	2	18	w.	W. E. Graves.
Marion	Crittenden	571	19	47.7	− 0.6	73	6	26	25†	32	1.69	−2.03	0.71	0	4	13	6	11	w.	B. C. Paris.
Mayfield	Graves	364	8	45.8	− 1.7	73	4	25	29	34	2.15	−2.05	0.80	0	5	15	5	10	n.	J. N. Davis.
Owensboro	Daviess	479	21	46.1	− 1.4	72	16	26	30	31	1.94	−1.51	0.75	0	5	15	2	13	nw.	Henry S. Berry.
Paducah	McCracken	341	18	47.8	− 1.1	72	6	28	13†	35	1.87	−1.91	0.85	0	5	19	3	8	w.	E. Futrell, Jr.
Princeton	Caldwell	529	8	45.4	− 1.1	73	6	22	30	38	2.07	−1.98	0.90	0	5	14	0	16	n.	Ray Baker.
Russellville	Logan	590	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	47.8	− 1.7	70	6	26	24‡	35	3.45	−0.28	0.40	0	4	16	2	12	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	43.3	− 1.2	72	6	19	30	41	1.83	−1.14	0.83	0	5	17	3	10	nw.	C. E. Barret.
Bardstown	Nelson	637	21	46.4	− 0.6	74	6	21	30	43	1.65	−1.73	0.60	0	5	18	3	9	n.	Chas. M. Talbott.
Bowling Green	Warren	500	27	48.2	+ 0.9	73	6†	26	24†	40	1.75	−1.86	0.80	0	6	16	14	0	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0	....	....	....	....	....	....	....	1.59	......	0.74	0	9	....	....	....	....	James H. Young.
Burnside	Pulaski	773	25	....	....	....	....	....	....	....	2.12	−1.09	1.20	0	5	....	....	....	....	C. L. Hurt.
Carrollton	Carroll	492	18	....	....	....	....	....	....	....	1.80	−1.13	0.83	0	10	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	4	....	....	....	....	....	....	....	2.12	......	0.72	0	9	....	....	....	....	W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{c}48.0	+ 1.2	73^{c}	6	21^{c}	29	41^{c}	2.03	−1.87	1.34	0	6	13^{c}	6^{c}	8^{c}	n.	P. W. Ray.
Eubank	Pulaski	1177	23	45.2	+ 0.7	70	6†	22	26	39	3.78	+0.75	3.22	0	4	13	4	13	ne.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	45.5	− 0.7	70	16	24	26	34	2.05	−1.36	0.73	0	8	14	2	14	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	47.2	− 1.3	72	8	25	30	36	1.53	−2.00	0.53	0	5	13	8	9	n.	V. P. Atkinson.
Greensburg	Green	581	25	45.1	+ 0.4	72	16	20	30	42	1.62	−1.79	0.57	0	7	10	4	16	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15	....	....	....	....	....	....	....	2.37	−0.34	0.76	0	8	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	20	46.0	− 0.7	70	16	26	26	31	1.24	−1.97	0.68	0	6	14	5	11	nw.	W. J. Piggott.
Junction City	Boyle	985	24	44.4	+ 1.8	72	6	21	14	44	2.69	−0.45	1.30	0	12	8	6	16	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	45.0	− 1.3	72	16	22	30	37	2.10	−1.83	0.91	0	7	14	7	9	nw.	John E. Stone.
Lexington	Fayette	989	30	44.4	− 0.3	68	6†	24	25	27	2.24	−1.24	1.11	0	6	11	6	13	w.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Loretto Academy.
LOUISVILLE	Jefferson	525	45	46.2	− 0.1	70	16	28	25	28	1.19	−2.99	0.66	0	6	10	6	14	w.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	44.4	− 2.2	70	16†	23	26	36	1.64	−0.79	0.75	0	7	12	9	9	n.	Wm. I. Hunt.
St. John	Hardin	777	21	45.5	+ 0.1	71	16	24	25†	36	1.50	−1.98	0.47	0	7	21	6	3	......	Sisters of Loretto.
Scott¶	Kenton	900	20	44.6	− 0.4	69	6	21	26	33	1.71	−1.09	0.81	0	8	8	7	15	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	46.0	+ 1.6	72	6	20	26	40	1.73	−1.68	0.60	0	7	13	6	11	nw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	43.6	− 1.3	70	16	22	26†	39	1.71	−1.39	0.62	0	6	12	6	12	sw.	E. D. Bourne.
Williamstown	Grant	943	15	46.3	+ 1.2	72	6	23	25	36	2.24	−0.10	0.85	0	6	7	14	9	......	Miss Rose Carter.
Woodbury	Butler	533	0	....	....	....	....	....	....	....	1.53	......	0.73	0	8	....	....	....	....	Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	45.6	+ 1.5	75	6	20	30	46	1.32	−1.43	0.46	0	7	15	3	12	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	H. E. Way.
Catlettsburg‡	Boyd	534	29	....	....	....	....	....	....	....	1.34	−1.50	0.40	0	7	....	....	....	....	Forester Farley.
Cynthiana	Harrison	684	0	....	....	....	....	....	....	....	2.15	......	1.10	T.	5	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	29	....	....	....	....	....	....	....	1.85	1.32	0.55	0	8	11	5	14	e.	J. V. Oldham.
Farmers	Rowan	668	10	44.0	− 1.0	70	6†	19	26	43	2.14	−0.59	1.30	0	4	12	7	11	w.	Durwood Cassity.
Harlan	Harlan	1197	0	^{e}48.7	......	76^{e}	8	24^{e}	2	44^{e}	1.83	......	0.80	0	5	14^{e}	8^{e}	3^{e}	s.	Will Ward Duffield.
Jackson	Breathitt	776	6	....	....	....	....	....	....	....	1.41	−1.28	0.40	0	6	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	3	....	....	....	....	....	....	....	2.15	......	0.95	0	7	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	14	....	....	....	....	....	....	....	1.00	1.75	0.26	T.	9	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	20	45.1	+ 0.5	70	17	21	26	38	2.53	−0.31	1.05	0	8	15	4	11	w.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	B. H. Perkins.
Mount Sterling	Montgomery	930	28	44.1	− 0.2	69	6	22	24†	37	3.37	−0.08	1.90	0	8	18	1	11	nw.	W. R. McKee.
Pikeville	Pike	634	12	....	....	....	....	....	....	....	1.80	−1.07	0.68	0	6	....	....	....	....	I. M. Williams.
Richmond	Madison	926	24	46.0	− 0.8	71	6	23	26	36	3.40	+0.71	2.35	0	6	14	1	15	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	43.0	......	75	7	20	26†	42a	1.32	......	0.58	0	4	15	6	9	......	O. A. Lund.
Williamsburg	Whitley	939	20	48.8	1.7	72	17	24	25†	40	1.60	−1.33	0.60	0	6	13	7	10	w.	N. C. Jones.
State averages and extremes.				46.1	.....	77	6	19	26†	46	1.90	......	3.22	T.	6	14	5	11	w.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky

Daily Precipitation for November, 1918.

Stations		Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G									[illegible]								.58	.06										[illegible]				[illegible]
Blandville	M									.04						.01	.40	.12	[illegible]									[illegible]					[illegible]
Calhoun	G									.24						T.	.12	[illegible]	[illegible]	.01									.61				[illegible]
Earlington	G									.22							.10	.36	.27										.60				[illegible]
Greenville	G																	.33	.07										[illegible]				[illegible]
Henderson	O	.21								.30							.14		.28										.70				[illegible]
Hopkinsville	C									.36							T.	[illegible]	[illegible]			[illegible]							.70				1.79
Marion	O								T.	.40							.40	.18	T.										.71				[illegible]
Mayfield	M	.03								.47							.20	[illegible]															[illegible]
Owensboro	O									.25							.16	.75	.15										[illegible]				1.94
Paducah	O									.45							.37	.16	.04										[illegible]				1.87
Princeton	G									.04							T.	.50	.03	[illegible]									[illegible]				2.07
Russellville	G																																
Central Division																																	
Alpha	C									T.							T	2.20	.65	.20		T.							[illegible]				[illegible]
Anchorage	O									.22								.41	.30	.04	T								.86				1.83
Bardstown	S									.25							.20	.30	.30										.60				1.65
Bowling Green	G									.40							.10	.15	.25	.05									.80				1.75
Brownsville	G	.03								.08	.24						.14	.15	.13	.06	.02								.74				[illegible]
Burnside	C																.05	1.20	.30	.10									.47				2.12
Carrollton	O	.03									.18						.05	.15	.21	.23	.06	.01							.83	.05			1.80
Cloverport‖	O	.18								.04	.01						T.	.08	.72	.18	.09	.02							.80				2.12
Edmonton	G									.14							.09	1.34	.30	.01	T.								.15				2.03
Eubank	C										.08							3.22		.05									.43				3.78
Frankfort‖	K									.05	.03						.28	.73	.21	.08	.03	T.							.64				2.05
Franklin	G									.35							.20	.25	.20										.53				1.53
Greensburg	G									.19							.16	.47	.16	.06	.01								.57				1.62
High Bridge	K	.05								T.	.23						.18	.76	.57	.03	.02								.53				2.37
Irvington	O									.15							.12	.15	.10	.04									.68				1.24
Junction City	K							.02	.04	.15	.05						.10	1.30	.34	.15	.03	.03	.02						.46				2.69
Leitchfield	G									.23							.22	.25	.45	.04								*	.91				2.10
Lexington ***	K	T.								.14							.10	1.11	.38	.04		T.							.47				2.24
Loretto	S																																
LOUISVILLE***	O	T.							T	.18							.20	.11	.03	.01	T	T.							.66				1.19
Do. (Cherokee Park)	O	.06							T.	.28							.17	.07	.29	.02									.75				1.64
St. John	S									.17							.11	.25	.47	.04		.01							.45				1.50
Scott	L	.03							T.	.14							.18	.16	.24	.15									.81				1.71
Shelbyville	S									.27							.15	.20	.45	.04		.02							.60				1.73
Taylorsville	S	T							T	.26							.14	.38	.28	.03	T	T.							.62				1.71
Williamstown	L								T.	.28							.18	.85	.28	.10	T.								.55				2.24
Woodbury	G	.04								.13	.11						.09	.22	.15	.06									.73				1.53
Eastern Division.																																	
Beattyville	K	T.									.03						T.	.46	.42	.11	.14	.02							14	T.			1.32
Berea	K																																
Catlettsburg‖	B	.12																.35	.14	.08	.16	.09							.40				1.34
Cynthiana	L							T.	T.	.20							T.	1.10	.40	.10		T.							.35				2.15
Falmouth	L									.04	.16						.10	.46	.39	.10	.05								.55				1.85
Farmers	L																	1.30	.15	.21									.48				2.14
Harlan	K									.02							15	.38						.48					.80				1.83
Jackson	K										.10						T.	.15	.32	.23	.11	T.							.40				1.41
London‖	C										.10						.05	.10	.95	.15	.20								.60				2.15
Louisa‖	B	.12	.03								.08						T.	.11	.19	.05	.12	.04		T.					.26				1.00
Maysville‖	O	.05								T.	.29						.02	1.05	.04	.22	.19								.67	T.			2.53
Middlesboro	C																																
Mount Sterling	L									.20							.46	1.90	.06	.23	.03	.03							.46				3.37
Pikeville‖	B	.06																	.68	.14	.12								.68	.12			1.80
Richmond	K	T.								.12							.25	2.35	.12	.06									.50				3.40
Weeksbury	B																.15	.58		.09									.50				1.32
Williamsburg‖	C	.05															.05	.40	.45	.05	T.		T.						.60				1.60

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

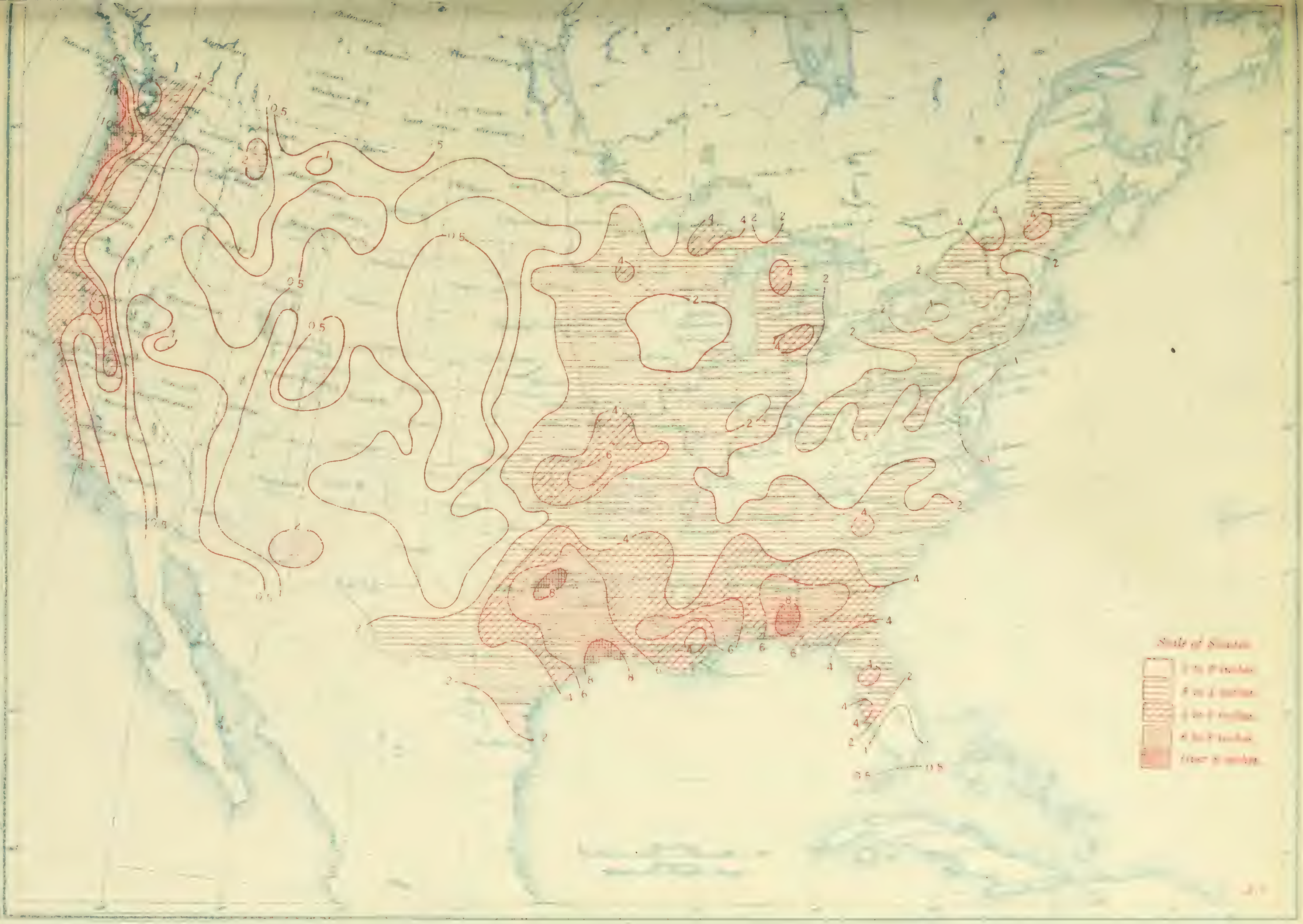
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for November, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum...	52	63	69	69	68	74	66	73	67	67	56	60	63	69	64	73	70	68	45	45	47	46	45	43	41	52	60	59	51	52	..	59.2
	Minimum....	43	31	31	41	32	33	41	55	51	24	24	27	33	27	33	51	52	42	41	40	38	35	33	29	24	24	25	43	38	25	..	35.5
Blandville	Maximum...	52	60	67	69	68	71	65	65	62	54	52	60	61	65	61	71	62	51	53	45	45	40	44	40	39	46	57	58	49	46	..	55.9
	Minimum....	34	35	40	44	45	46	54	59	46	37	32	30	37	37	48	54	51	40	38	36	35	35	30	30	29	27	29	42	34	27	..	38.7
Calhoun	Maximum...	50	61	68	70	66	72	67	70	67	58	59	59	63	66	62	71	67	52	44	44	46	41	45	41	41	51	59	59	49	46	..	57.1
	Minimum....	37	28	35	43	38	38	45	54	50	34	29	27	33	30	40	51	51	40	40	39	37	33	31	30	25	26	27	46	35	24	..	36.5
Earlington	Maximum...	52	65	70	73	72	77	68	72	68	59	55	60	63	69	64	74	65	50	46	45	45	42	46	41	41	51	61	60	55	49	..	58.6
	Minimum....	36	28	37	41	36	35	50	58	52	33	28	25	30	29	36	53	49	43	41	38	40	35	33	32	25	26	26	47	33	23	..	41.8
Greenville	Maximum...	51	62	70	71	67	74	69	71	71	..	55	61	61	70	65	73	72	55	46	46	46	46	44	41	40	50	62	61	61	46	..	a58.9
	Minimum....	39	26	33	42	37	35	46	56	..	32	29	25	30	28	36	54	50	41	40	37	38	34	32	29	24	29	25	48	37	21	..	a35.6
Hopkinsville	Maximum...	56	64	70	74	72	74	68	72	66	58	54	62	64	63	61	73	61	58	47	49	45	46	46	43	43	54	63	59	51	49	..	58.8
	Minimum....	35	29	33	39	41	40	42	54	48	33	30	29	29	28	41	52	50	42	39	32	35	33	31	28	27	28	30	47	30	23	..	35.9
Marion	Maximum...	60	61	67	70	70	73	66	72	66	55	54	61	64	65	62	71	63	50	45	45	44	40	43	39	40	50	59	59	50	46	..	57.0
	Minimum....	37	36	42	43	39	43	52	57	51	35	31	29	35	39	47	53	49	40	38	37	37	34	32	29	26	26	31	45	34	26	..	38.4
Mayfield §§	Maximum...	54	61	66	73	69	72	65	61	63	55	54	61	60	66	71	61	44	55	48	48	38	44	40	42	45	60	50	50	48	48	..	55.7
	Minimum....	33	32	36	42	44	41	52	54	51	32	32	27	29	32	38	57	42	38	33	35	35	30	29	27	29	31	31	36	25	26	..	36.0
Owensboro	Maximum...	46	59	67	64	64	71	61	69	66	54	57	55	59	60	64	72	68	43	45	44	44	44	44	38	43	50	59	49	49	43	..	55.0
	Minimum....	36	29	37	44	40	40	46	55	51	35	34	28	32	32	33	51	50	42	41	38	37	35	32	30	29	28	29	40	35	26	..	37.2
Paducah (Lone Oak)	Maximum...	65	66	68	70	71	72	68	69	67	68	60	62	63	64	68	67	70	62	56	47	45	43	42	40	39	40	57	63	56	50	..	59.3
	Minimum....	34	33	35	44	42	43	53	49	50	50	29	30	28	33	36	34	42	33	38	37	37	34	30	30	28	29	30	33	32	31	..	36.2
Princeton §§	Maximum...	46	60	67	68	69	73	63	69	61	54	44	59	60	65	63	72	62	44	42	45	40	39	45	39	39	47	59	52	48	45	..	54.6
	Minimum....	40	29	30	38	40	35	49	55	52	44	30	26	28	28	36	37	58	42	40	40	40	35	32	30	28	28	28	28	38	22	..	36.2
Russellville §§	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum...	54	57	63	68	60	70	69	68	61	57	59	62	58	63	63	67	69	62	45	43	44	40	49	45	43	42	68	64	59	51	..	57.4
	Minimum....	40	28	34	45	35	35	43	50	51	35	29	30	31	30	50	58	52	42	40	41	39	35	34	26	26	31	40	49	41	27	..	38.2
Anchorage	Maximum...	43	58	66	64	58	72	66	67	62	54	47	56	61	67	64	71	68	54	43	44	44	41	42	38	39	47	54	59	45	43	..	54.6
	Minimum....	29	23	33	35	34	31	35	49	40	32	31	22	26	27	36	47	51	41	38	40	35	33	27	25	20	20	22	40	20	19	..	32.0
Bardstown	Maximum...	48	63	68	66	64	74	69	67	61	57	55	64	66	71	65	73	67	60	50	51	45	44	43	43	46	52	60	67	52	48	..	58.6
	Minimum....	37	25	32	38	33	31	31	50	46	35	31	24	28	29	35	51	53	41	39	40	39	34	32	23	22	22	24	42	40	21	..	34.3
Bowling Green	Maximum...	54	63	70	72	69	73	66	71	66	58	57	61	63	70	63	73	69	59	44	45	45	45	45	42	43	48	63	59	58	52	..	58.9
	Minimum....	39	30	33	45	37	37	41	53	52	37	31	30	30	30	36	54	57	42	40	41	39	36	33	26	28	30	28	46	40	26	..	37.6
Edmonton	Maximum...	61	69	66	65	67	73	65	71	68	56	55	61	59	66	68	72	68	55	44	44	45	50	44	43	..	..	..	64	65	64	..	c60.3
	Minimum....	43	25	31	47	35	32	52	45	49	34	29	25	27	26	27	33	53	42	38	42	40	40	38	23	..	..	..	45	21	24	..	c35.8
Eubank	Maximum...	42	58	65	65	61	70	69	63	60	50	60	63	60	65	65	70	68	57	50	43	44	41	37	40	47	41	61	63	52	48	..	56.2
	Minimum....	36	24	31	44	33	35	34	48	47	31	30	24	26	26	35	50	52	40	37	38	38	33	32	23	23	22	30	30	40	36	..	34.3
Frankfort	Maximum...	47	53	64	61	58	67	65	65	63	55	51	56	58	61	65	70	68	56	45	46	46	42	41	38	38	45	53	66	53	44	..	54.7
	Minimum....	37	29	32	43	32	33	37	49	52	38	37	27	32	30	33	49	55	42	40	41	41	36	33	28	25	24	26	41	40	26	:	36.3
Franklin	Maximum...	55	61	69	70	67	70	65	72	68	55	55	62	61	69	62	71	67	56	44	44	43	43	39	40	35	46	63	55	50	42	..	56.6
	Minimum....	34	29	39	46	37	41	47	54	52	34	31	30	33	33	42	56	55	42	42	40	37	35	30	30	27	28	35	42	30	25	..	37.9
Greensburg	Maximum...	48	56	66	67	62	71	62	67	65	56	54	60	60	65	67	72	68	58	43	44	44	44	41	40	41	50	60	61	53	47	..	56.4
	Minimum....	38	24	30	42	30	29	33	43	51	29	25	23	26	25	29	52	56	41	39	40	39	34	33	24	24	25	27	44	40	20	..	33.8
Irvington	Maximum...	46	56	63	62	60	69	67	68	63	52	49	55	58	62	69	70	66	52	43	45	45	40	40	37	39	40	55	59	48	42	..	54.0
	Minimum....	38	28	40	44	39	38	48	55	50	35	31	30	32	34	44	52	50	40	40	40	38	35	30	31	28	26	32	46	35	27	..	37.9
Junction City	Maximum...	45	56	65	68	63	72	68	65	66	60	54	59	67	65	64	70	68	62	44	44	49	42	40	36	38	49	57	58	43	44	..	56.0
	Minimum....	31	23	29	38	30	29	34	47	48	38	30	22	26	21	30	48	56	41	39	38	33	34	32	22	23	23	24	36	37	25	..	32.9
Leitchfield	Maximum...	48	57	65	65	62	69	65	68	60	52	51	57	58	65	63	72	67	50	43	44	45	41	42	40	39	49	57	59	49	45	..	54.9
	Minimum....	37	26	32	41	35	33	39	52	50	34	29	27	30	28	36	52	50	40	39	39	38	34	30	24	24	25	27	43	36	22	..	35.1
Lexington	Maximum...	39	54	63	57	55	68	66	62	59	44	47	55	55	64	64	68	66	45	40	42	40	38	35	34	36	46	52	60	41	40	..	51.2
	Minimum....	33	32	42	44	38	41	49	52	44	38	35	33	36	43	46	51	45	37	37	38	38	34	30	27	24	25	34	43	32	27	..	37.6
Loretto	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Louisville	Maximum...	44	55	65	62	59	70	64	66	64	53	51	56	60	64	63	70	65	47	43	45	44	40	39	36	38	46	55	59	47	43	..	53.8
	Minimum....	35	32	40	46	40	42	49	55	44	40	35	34	38	40	43	52	47	40	39	41	37	35	31	30	28	29	32	42	35	30	..	38.7
Do. (Cherokee Park)	Maximum...	47	54	65	63	57	69	65	67	64	56	49	55	58	63	64	70	70	45	45	45	45	41	40	37	36	45	53	59	50	44	..	54.0
	Minimum....	34	26	33	40	34	33	40	51	50	35	29	27	29	30	36	47	54	41	38	39	37	33	27	28	25	23	24	40	37	25	..	34.8
St. John	Maximum...	50	56	65	64	60	70	64	68	62	52	50	60	63	64	63	71	68	57	43	44	44	45	41	38	40	47	55	64	49	47	..	55.5
	Minimum....	37	25	34	40	36	35	37	51	50	33	28	27	30	28	36	53	53	41	38	39	39	34	30	25	24	25	26	47	39	24	..	35.5
Scott	Maximum...	45	55	63	59	57	69	63	59	59	51	52	58	59	64	65	63	68	61	44	43	41	39	37	36	40	44	50	59	49	43	..	53.2
	Minimum....	32	26	33	47	37	39	43	52	51	39	34	25	33	36	38	47	57	40	37	40	37	34	29	24	22	21	24	38	37	25	..	35.9
Shelbyville	Maximum...	44	58	65	64	59	72	65	65	60	53	53	60	61	67	64	71	68	54	44	44	43	41	41	39	40	47	55	60	50	43	..	55.0
	Minimum....	33	24	35	37	31	32	38	48	50	35	30	25	28	29	37	48	49	40	37	38	37	32	28	25	21	20	25	40	37	22	..	37.0
Taylorsville	Maximum...	45	52	64	59	57	67	64	66	61	53	53	55	58	61	64	70	67	54	44	45	44	41	39	37	37	46	54	60	51	42	..	53.7
	Minimum....	36	25	30	37	30	28	32	47	53	36	29	24	27	25	29	49	53	42	40	41	40	25	32	25	23	22	23	39	40	22	..	33.5
Williamstown	Maximum...	47	48	64	64	61	72	67	66	63	53	54	62	60	68	64	65	68	60	52	43	40	40	38	38	40	48	53	60	48	44	..	55.0
	Minimum....	34	29	36	46	37	36	46	50	50	37	37	30	34	38	40	46	50	50	38	39	36	34	29	25	23	30	37	39	37	35	..	37.6
Eastern Division.																																	
Beattyville	Maximum...	46	57	71	66	61	75	70	66	64	53	58	65	61	70	65	70	72	63	44	44	46	42	41	43	44	51	60	66	59	49	..	58.1
	Minimum....	34	27	27	40	31	31	31	45	48	34	27	25	26	24	27	43	51	42	40	40	40	36	34	25	21	24	26	49	29	20	..	33.2
Berea	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum...	47	56	68	60	61	70	70	69	64	52	56	60	67	65	70	69	70	59	43	43	43	43	39	38	40	48	59	59	55	45	..	56.3
	Minimum....	34	23	26	40	28	28	30	44	47	32	27	21	24	23	27	45	52	51	40	40	38	35	33	23	21	19	21	34	38	20	..	31.8
Harlan	Maximum...	43	68	67	68	66	71	72	76	68	56	65	64	61	67	69	64	69	..	..	..	..	..	64	48	44	56	65	68	60	52	..	e62.8
	Minimum....	34	24	30	36	33	31	33	43	50	38	28	32	33	29	29	48	58	..	..	..	..	..	27	26	25	27	37	43	40	32	..	e34.6
Maysville	Maximum...	48	55	67	59	59	69	68	66	61	51	53	57	59	65	66	65	70	60	45	50	45	43	42	37	40	45	51	57	58	38	..	55.0
	Minimum....	34	26	29	45	34	33	35	47	50	35	40	27	30	30	30	47	54	43	40	41	40	36	34	23	26	21	24	35	40	26	..	35.2
Mount Sterling	Maximum...	44	55	66	59	57	69	68	67	59	59	52	58	55	63	67	56	56	67	42	43	46	40	38	37	40	45	53	67	51	43	..	54.1
	Minimum....	35	25	29	42	31	34	36	48	42	37	26	35	29	33	32	41	54	50	39	37	38	33	31	22	22	22	24	35	35	25	..	34.1
Richmond	Maximum...	48	57	65	64	62	71	68	63	62	52	57	60	60	67	65	70	68	65	46	46	45	42	38	39	40	48	52	65	54	45	..	56.1
	Minimum....	35	27	35	44	34	35	44	48	49	34	30	28	33	37	41	50	55	39	37	38	37	34	33	24	24	23	27	42	38	25	..	36.0
Weeksbury	Maximum...	54	60	65	64	66	72	75	64	54	62	59	57	60	55	60	65	40	40	38	40	42	42	38	39	41	49	62	64	45	..	..	a54.1
	Minimum....	25	25	38	32	33	30	34	40	48	34	34	32	36	30	24	25	39	40	35	35	36	33	30	22	30	20	20	34	34	25	..	31.8
Williamsburg	Maximum...	52	59	61	67	71	70	68	70	68	69	66	60	67	66	68	68	72	66	60	53	48	47	48	47	44	50	62	68	55	48	..	60.6
	Minimum....	40	29	30	39	31	33	49	50	45	47	36	32	27	26	29	51	48	40	42	41	40	37	33	32	24	38	38	41	41	24	..	37.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
1 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches
Over 8 inches
0.5
1
2
4
6
8
10

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WEATHER BUREAU
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CLIMATOLOGICAL DATA

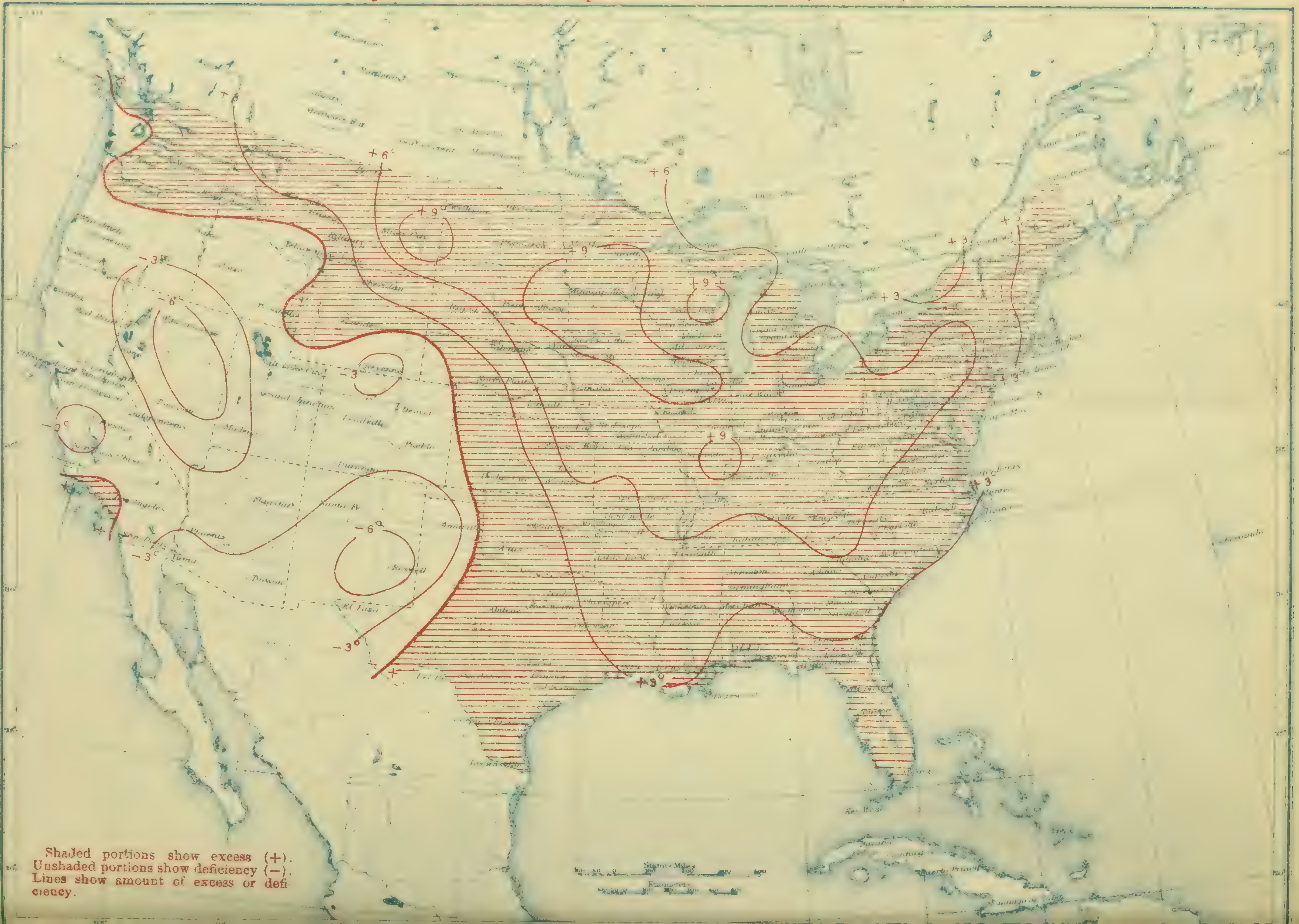
KENTUCKY SECTION

DECEMBER, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JANUARY 31, 1919

Departure of the Mean Temperature from the Normal, December, 1918.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., December, 1918. No. 12

GENERAL SUMMARY.

The noteworthy features of the month's weather were the high average temperature, exceeded only in December, 1889, and the unusually light snowfall. In these features the month presents a remarkable contrast to December, 1917, when the mean temperature was 26.5°, the lowest of record, and the average snowfall was 17.3 inches, the greatest of record for the State for December. During the first three weeks minimum temperatures were more frequently above than below freezing, while maximum temperatures ranged generally from 50° to 65°, reaching 70° on several days. A few days of real winter weather occurred in the last week, temperatures remaining below freezing for several days. The hard freezes of this period were probably more beneficial than otherwise, because of the need of checking the growth of some early wheat which was becoming too rank; and also because there had previously been no favorable weather for putting up the year's supply of meat on the farm. Precipitation averaged somewhat above normal, but a rather disproportionate part of it occurred on the 31st, causing considerable run-off and some erosion.

Wheat and rye grew steadily during the mild weather. The early sown covered the ground with a dense sod, presenting an appearance rarely seen in this State in December. The long period of growing weather favored the late sown grain—an important part of the crop this year—largely compensating for the lateness in planting. The snowfall was too light to afford any protection of consequence.

PRESSURE.

During the first decade four low pressure formations—mostly long, shallow troughs—moved from the West or Northwest across the upper Mississippi Valley and Lake region, with center of lowest barometer well to the north. Similar "lows" passed eastward the 13-14th, 21st-22d, and the 27th. A deep low of marked strength passed northeastward from the lower Mississippi Valley to the lower Lake region and northeastern States during the 23d (p. m.) and the 24th; and, during the 30th-31st a deep trough moved slowly over the central Mississippi and Ohio valleys, attended by heavy rain. High pressure areas prevailed over this section during the 6th, 11-12th, 15-20th, 23d, 26th, and 28-29th.

The mean sea-level pressure, based on the records of two stations, was 30.12 inches. The extremes were 30.54 inches at Lexington on the 18th, and 29.57 inches at Louisville on the 24th.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 44.8°, which is 7.7° above the December normal. Temperature conditions were very similar to those usually prevailing in this State in November, in fact there was but little difference in temperature in any particular between this month and November preceding. The extremes for the month were 75° at Greenville and Owensboro on the 10th, and 14° at Junction City on the 27th.

PRECIPITATION.

Precipitation for the State, based on the reports of [illegible] stations, averaged 4.44 inches, which is 0.50 inch above normal. Rain was well distributed throughout the month; and occurred generally in light to moderate amounts except on the 31st, when amounts were excessive in central and western counties. The distribution over the State was fairly regular, most sections west of the mountains receiving from 4 to 6 inches. In the mountain counties and those bordering on the upper Ohio monthly amounts ranged generally between 2 and 4 inches. The extremes were 2.24 inches at Williamsburg and 7.10 inches at Lone Oak near Paducah. Snowfall averaged less than an inch, many stations reporting only a trace.

WIND.

The total wind movement at Louisville was 9,223 miles, and at Lexington 7,575 miles, with average hourly velocities of 12.4 and 10.2 miles, respectively. The maximum velocity for five minutes was at the rate of 39 miles per hour from the south on the 13th at Louisville, and 40 miles from the south on the 31st at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 81 per cent, at 12 noon 70 per cent, and at 7 p. m. 76 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 39 and at Lexington 32.

MISCELLANEOUS.

Rivers.—The Ohio River was at low stages until the 10th, when a rise began in the upper reaches, continuing until the 18th and causing good stages which prevailed until the end of the month. The heavy rains at the end of the month caused local floods in some headwater streams. Damage from this cause was reported from Hopkinsville on the 31st.

ERRATA.

November: Jackson total precipitation should be 1.31

COMPARATIVE DATA FOR DECEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with 0.01 in. or more.
1889	50.2	+13.1	76	13	1.57	−2.37	.
1890	37.8	+0.7	70	12	3.51	−0.43	..
1891	42.4	+5.3	70	15	4.10	+0.16	..
1892	34.6	−2.5	74	−3	4.22	+0.28	.
1893	39.0	+1.9	78	10	2.69	−1.25	
1894	38.7	+1.6	76	11	4.31	+0.37	10
1895	38.8	+1.7	77	6	4.43	+0.49	9
1896	39.6	+2.5	73	7	1.82	−2.12	4
1897	38.0	+0.9	72	3	3.75	−0.19	10
1898	34.1	−3.0	70	−12	2.74	−1.20	8
1899	34.8	−2.3	70	−15	4.26	+0.32	10
1900	38.6	+1.5	70	12	2.59	−1.35	8
1901	32.3	−4.8	72	−22	4.90	+0.96	[illegible]
1902	36.7	−0.4	72	3	7.36	+3.42	12
1903	30.7	−6.4	78	0	2.88	−1.06	7
1904	36.4	−0.7	[illegible]	−2	4.30	+0.36	11
1905	37.3	+0.2	66	11	4.38	+0.44	8
1906	39.0	+1.9	76	−9	5.64	+1.70	15
1907	38.5	+1.4	70	8	3.20	−0.74	11
1908	39.8	+2.7	74	7	2.42	−1.52	[illegible]
1909	29.9	−7.2	79	14	3.46	−0.48	9
1910	31.1	−6.0	66	3	3.37	−0.57	8
1911	41.6	+4.5	74	11	6.25	+2.31	12
1912	37.2	+0.1	73	5	3.98	+0.04	9
1913	39.5	+2.4	70	11	2.73	−1.21	7
1914	32.8	−4.3	70	−16	5.22	+1.28	14
1915	37.0	−0.1	64	9	7.56	+3.62	12
1916	35.5	−1.6	74	−14	4.23	+0.29	[illegible]
1917	26.5	−10.6	72	−21	2.01	−1.93	8
1918	44.8	+7.7	75	14	4.44	+0.50	12

Climatological data for December, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	46.0	+10.4	73	10	19	29	39	3.67	−0.28	1.60	0.4	10	12	10	9	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	45.6	+ 8.8	72	10	18	26	35	5.98	+2.05	2.29	0.5	13	9	8	14	sw.	E. W. Horr.
Calhoun	McLean	437	14	45 5	+ 8.1	71	10	19	29	37	5.48	+1.31	1.77	0.5	14	6	12	13	s.	W. A. Taylor.
Earlington	Hopkins	420	27	46.3	+ 8.2	74	8	20	24	42	4.61	+0.80	1.85		14	13	0	18	s.	Brick Southworth.
Greenville	Muhlenburg	519	1	^{b}45.8		75^{b}	10	17^{b}	29	43^{b}	5.06		1.80		9	10^{b}	9^{b}	10^{b}	n.	C. R. Lovell.
Henderson	Henderson	327	9								5.37	+1.36	1.80	0.2	10					W. W. Shelby.
Hopkinsville	Christian	524	21	46.0	+ 8.2	73	10	20	29	42	5 44	+0.67	1.81	T.	10	11	5	15	w.	W. E. Graves.
Marion	Crittenden	571	19	44.9	+ 7.8	70	10	19	25†	28	5 46	+1.64	1.70	T.	9	10	5	16	s.	B. C. Paris.
Mayfield	Graves	364	8	45.4		72	10	18	26	38	3.36		0.90		8	9^{a}	5^{a}	16^{a}	s.	J. N. Davis.
Owensboro	Daviess	479	21	46.4	+ 9 8	75	10	20	29	29	4.94	+1.08	1.16	0.2	14	11	5	15	se.	Henry S. Berry.
Paducah	McCracken	341	18	46.4	+ 7.8	75	10	18	26	32	7.10	+3.32	2.00	T.	10	14	2	15	w.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{e}46.2	+ 9.5	73	8	20	26	35	3.75	−0.34	1.30	T.	8	17^{e}	0^{e}	9^{e}		Ray Baker.
Russellville	Logan	590	6																	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	47.6	+ 7.2	68	7	20	29	34	5.49	+0.75	1.50	0.4	8	12	6	13	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	42.3	+ 8.4	68	10	16	27	37	4.69	+0.69	1.59	0.2	14	14	2	15	sw.	C. E. Barret.
Bardstown	Nelson	637	21	44.7	+ 9.0	69	13	18	28	40	4.59	+0.23	1.30	1.2	11	16	3	12	sw.	Chas. M. Talbott.
Bowling Green	Warren	500	27	47.0	+ 9.4	70	8†	20	29	36	6.25	+1.93	3.00	T.	12	9	12	10	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0								4.36		1.03	0.2	14					James H. Young.
Burnside	Pulaski	773	25								2.74	−1.31	0.70	1.2	10					C. L. Hurt.
Carrollton	Carroll	492	18								3 61	+0.61	1.37		14					Charlie Oliver.
Cloverport	Breckenridge	375	4								4.27		1.05	0.5	12					W. A. Cockerill.
Edmonton	Metcalfe	600	24	^{h}44.0	+ 6.4	66^{h}	9	17^{h}	27	42^{h}	5.11	+0.84	2.10	T.	10	0^{h}	12^{h}	11^{h}	s.	P. W. Ray.
Eubank	Pulaski	1177	23	43.2	+ 7.5	64	9	18	27	36	4.25	+0.83	1.03	2.0	12	6	6	19	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	44.6	+ 7.3	68	13	22	26	31	4.60	+1.01	0.60	0.2	13	11	3	17	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	45.9	+ 5.9	68	10	21	29	30	4.41	+0.13	1.92	0.2	10	11	9	11	sw.	V. P. Atkinson.
Greensburg	Green	581	25	44.6	+ 8.6	67	8†	17	29	37	4.14	−0.02	1.05	0.5	12	8	1	22	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15								4.41	+0.01	0.93	1.0	15					Miss Lulu Wood.
Irvington	Breckenridge	646	20	45.0	+ 9.0	73	10	20	29	29	3.90	0.00	1.53	1.0	11	12	1	18	sw.	W. J. Piggott.
Junction City	Boyle	985	24	45.0	+ 9.7	69	11	14	27	41	5.47	+1.24	1.80	4.3	18	5	6	20	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	44.6	+ 8.8	69	8	16	29	34	5.70	+1.08	2.15	0.5	11	10	10	11	sw.	John E. Stone.
Lexington	Fayette	989	30	42.8	+ 6.4	64	13	18	26	29	4.83	+1.51	2.30	0.6	15	5	8	18	s.	U. S. Weather Bureau.
Loretto‡‡	Marion	681	19																	Loretto Academy.
LOUISVILLE	Jefferson	525	45	44.8	+ 6.7	67	10	22	26	31	4.48	+0.75	1.15	0.1	13	7	6	18	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	8	42.8	+ 7.9	67	10†	20	26	33	4.95	+0.78	1.30	1.0	12	11	5	15	s.	Wm. I. Hunt.
St. John	Hardin	777	21	44.0	+ 9.4	68	8	17	29	31	5.50	+1.08	1.70	1.2	16	14	3	14		Sisters of Loretto.
Scott ¶	Kenton	900	20	42.7	+ 9.5	65	13	21	26†	29	4.48	+1.27	1.34	1.2	14	6	8	17	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	43.0	+ 8.0	66	10†	17	27	32	4.64	+0.75	0.95	0.5	14	8	6	17	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	43.4	+ 8.3	67	13	19	27	35	5.31	+0.89	1.40	1.0	15	10	5	16	sw.	E. D. Bourne.
Williamstown	Grant	943	15	44.0	+11.1	65	13	21	26†	30	4.06	+0.46	0.67	1.0	13	8	13	10		Miss Rose Carter.
Woodbury	Butler	533	0								3.20		0.71	T.	11					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	44.4	+10.3	70	10	15	27	40	3 20	−1.57	0.76	1 7	14	4	10	17	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16																	H. E. Way.
Catlettsburg‡	Boyd	534	29								3.34	−0.16	0.85	0.5	12					Forester Farley.
Cynthiana	Harrison	684	0								2.90		0.55	T.	7					P. H. Kehoe.
Falmouth	Pendleton	600	29								4.00	+0.65	1.10	1.0	9	8	5	18	w.	J. V. Oldham.
Farmers	Rowan	668	10	44.2	+ 8.7	68	9^{+}	17	30	44	4.66	+1.06	1.60	1.0	9	9	3	19	w.	Durwood Cassity.
Harlan	Harlan	1197	0	^{e}42.9		67^{e}	14	20^{e}	27	36^{e}	4.62		2.08	1.0	10	11^{b}	8^{b}	10^{b}	s.	Will Ward Duffield.
Jackson	Breathitt	776	6								2.83	−0.77	0.72	T.	7					Jas. L. McCoy.
London	Laurel	1190	3								3.92		0.80	T.	12					C. R. Lee.
Louisa	Lawrence	584	14								2.74	−0.42	0.68	T.	15					Miss Carrie S. Adams.
Maysville	Mason	524	20	44.4	+10.6	69	14	20	30	32	3.58	−0.18	1.04	T.	11	11	9	11	e.	J. C. Armstrong
Middlesboro	Bell	1128	21																	B. H. Perkins.
Mount Sterling	Montgomery	930	28	43.0	+ 7.6	65	9†	16	27	36	5.16	+1.21	1.82	0.8	14	11	2	18	w.	W. R. McKee.
Pikeville	Pike	634	12								3.16	−1.10	0.86	T.	8					I. M. Williams.
Richmond	Madison	926	24	45.0	+ 7.7	65	13†	19	27	32	4.96	+1.30	2.00	2.0	10	8	5	18		J. W. Crooke.
Weeksbury	Floyd	1216	4																	O. A. Lund.
Williamsburg	Whitley	939	20	46.6	+ 8.3	68	7*	15	27	40	2 24	−1.45	0.54	1.5	10	8	7	16	w.	N. C. Jones.
State averages and extremes				44.8		75	10	14	27	44	4.44		3.00	0.7	12	10	6	15	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

* Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post office address, Normal, Ky. ‡‡ Nerinx, Ky. ¶ Covington, Ky

Daily Precipitation for December, 1918.

Stations		Day of month																														[illegible]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G			.09						.33			.33	.42	.33						.08	.09	.36						.04			[illegible]	[illegible]
Blandville	M									.10	.08		.19	.15	.36					[illegible]	.90	.24		[illegible]	.16	T.						[illegible]	[illegible]
Calhoun	G			.05						.58	.12	.31	T.	.54	.89	.01					.37	.26	.04	T	.44	T	T	T	.05		.05	1.77	[illegible]
Earlington	G			.06						.16	.02		.24	.40	.57	.02					.66	.30				.01		.03	.07		[illegible]	[illegible]	[illegible]
Greenville	G										.50			.90	.90	.05					.28	.23			[illegible]				[illegible]			[illegible]	[illegible]
Henderson‖	O.									.31	.40			1.80	.80	.20					.20	.52		T.	.20				[illegible]			[illegible]	[illegible]
Hopkinsville	C.									.33	.16	.13	.27	.61	.91						.51	.40			.31	T.		T.	T.		T	1.81	[illegible]
Marion	O			T.						.67	T.		.60	1.00	.30						.63	.20			.18		T.	T.			.18	1.70	5.46
Mayfield	M										.28	.08		.70	.10						.70	.40			[illegible]							*	[illegible]
Owensboro	O			.04						.77	.10	.04	.10	1.10	.45						.13	.20	.05		.27	.20	T.	T.	T.		.03	1.16	[illegible]
Paducah	O									.16	.18		.27	1.88	.59						1.08	.46			.33	T		T	T.		.15	2.00	7.10
Princeton	G.										.35			.65	.95	.01					.03	.45		.01				T		T.		1.30	3.75
Russellville	G																																
Central Division.																																	
Alpha	C.									T.	.60	.60			1.40						.20	.85	T.		.30			.04				1.50	5.49
Anchorage	O			.06						.78	.18	.05	.09	*	1.59						.28	.25	.05		.27	T	.05	T.	T		.03	1.01	[illegible]
Bardstown	S.			.12						.55	.35	.30		.30	.65						.20	.30			.10	T			.12			1.30	[illegible]
Bowling Green	G.			.03						.15	.30		.35	.05	.83	.07					.32	.50	.15		.50		T		T.			3.00	6.25
Brownsville ‖	G.				.11						.25	.60	.02	.06	.81	.03					.15	.08	.63		.57		.01		.01	T.		1.03	4.36
Burnside‖	C.									.05	T	.10			.70	.30						.20	.64		.17	.20			.12			.26	2.74
Carrollton ‖	O.				T.					.09	1.37	.03		.97	.33	.02					.09	.03	.19		.33	.03	.02		.02	T.		.09	3.61
Cloverport‖	O.				.05						.68	.12		1.05	.56	.05					.12	.30	.12		.44	.08	T.		T			.70	4.27
Edmonton	G									.40	.34			.05	1.10						.16	.34		.32	.30	T.		T.	T.			2.10	5.11
Eubank	C.				.25				.03		.25	.70	.04		1.03	.21						.35	.65		.33	T		.09				.32	4.25
Frankfort‖	K.				.06					.16	.56	.51		.55	.55	.55					.07	.06	.41		.50	T.	.02		T.			.60	4.60
Franklin	G.									.20	.61	.18	.02	.08	.88						.24	.27			T.	T.		T	.01		T.	1.92	4.41
Greensburg	G			.05	.20					.05	.45	.13	.01		.99						.19	.62			.35	T.	T.		.05			1.05	4.14
High Bridge‖	K.				.10					.05	.38	.63		.07	.66	.16						.12	.93		.36	.03	.02		.05	.05		.80	4.41
Irvington	O.			.06						.50	.23		.10	.47	.38						.17	.07			.35	T.	T.	T	.04		T	1.53	3.90
Junction City	K.			.23	.01					.15	.65	.05	.08	.02	1.10	.10				.02	.12	.10	.30	.02	.44	.05			.23			1.80	5.47
Leitchfield	G.			.20						.99	.27		*	.40	.69						.19	.34			.42	T.		.05				2.15	5.70
Lexington ***	K			.07						.52	.15	.02	.08	.05	.74	.01					.01	.34	.04		.46	.03	T	T.	.05			2.26	4.83
Loretto	S.																																
LOUISVILLE***	O.			.05						.84	.28		.93	.37	.26						.17	.21	.03		.26	.01	T.	T.	T.		.21	.86	4.48
Do. (Cherokee Park)	O.			.05						.09	1.03	.19	1.30	.37	.06							.37	.22		.30		.08		T.			.89	4.95
St. John	S.			.13						.60	.18	.30	.01	.60	.70	.06					.20	.37	.05		.45	T.	.04	T.	.10	.01		1.70	5.50
Scott	L				.05					1.34		.27	T.	1.03	.61	.02					.08	.09	.13		.50	.03	.02	T.	.10			.21	4.48
Shelbyville	S.			.06						.65	.17	.30		.95	.73						.10	.25	.18		.27	.03	.01	T.	.01			.93	4.64
Taylorsville	S.			.07						.74	.13	.33	T.	.61	.86	.03					.12	.31	.15		.45	.03	.03	T.	.05	T.	T.	1.40	5.31
Williamstown	L			.02						.58	.60	.20		.63	.67							.23	.13	.53		.05	.02	T.	.04			.36	4.06
Woodbury ‖	G.				.06						.37	.24		.26	.66	.05					.10	.07	.31		.37		T.		T.	T.		.71	3.20
Eastern Division.																																	
Beattyville ‖	K.				.19					.01	.15	.26	T.	.02	.56	.45						.01	.76	T.	.20	.18	.03		.10	T		.28	3.20
Berea	K.																																
Catlettsburg‖	B.				.12						.64	.44	.03	.02	.10	.55							.85	.04	.10	T.			.05			.40	3.34
Cynthiana ‖	L.			T					T.		.50	.30		.50	T.	.55						T.	.35	T	.35	T.		T.				.35	2.90
Falmouth ‖	L										1.10	.36		.62	.57	.30							.36		.47	T.	T.		.06	T.		.16	4.00
Farmers	L.										1.60	.37			.85	.10						.19	.60		.27		.06	T.				.62	4.66
Harlan	K.				.20					*	*				2.08	.05						.03	1.10		.14	T.	T.		.10			.92	4.62
Jackson ‖	K.				.20					T.	.20	.50		T.	.10	.72						T.	.63		T.							.48	2.83
London‖	C.				.20						.21	.45			.80	.21						.20	.50	.08	.21	T.	.24	T.	.42			.40	3.92
Louisa‖	B.				.06					.05	.26	.18	T.	.04	.11	.62						.06	.68	.03	.10	.14	T.		.05	.03	T.	.33	2.74
Maysville‖	O.				.01					.03	1.04	.41		.40	.53	.24						.13	.54			T.			.05	T.		.20	3.58
Middlesboro	C.																																
Mount Sterling	L.			.10					T.	.44	.65	.19	T.	.06	1.00	.02					T.	.34	.22		.28	T.	.01	.01	.02			1.82	5.16
Pikeville‖	B.				T.	T				T.	.38	.28	T.		.06	1.24							.86	.06	.12	T.	T.		T.	T.		.16	3.16
Richmond	K.			T.	.15				T.	.06	.64				1.23	.05					T	.28	.30			T.	.10		.15			2.00	4.96
Weeksbury	B.																																
Williamsburg‖	C.				.03					T.	.53	.28			.18	.54						.05	.48		.07	T.	T	T	.03			.05	2.24

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

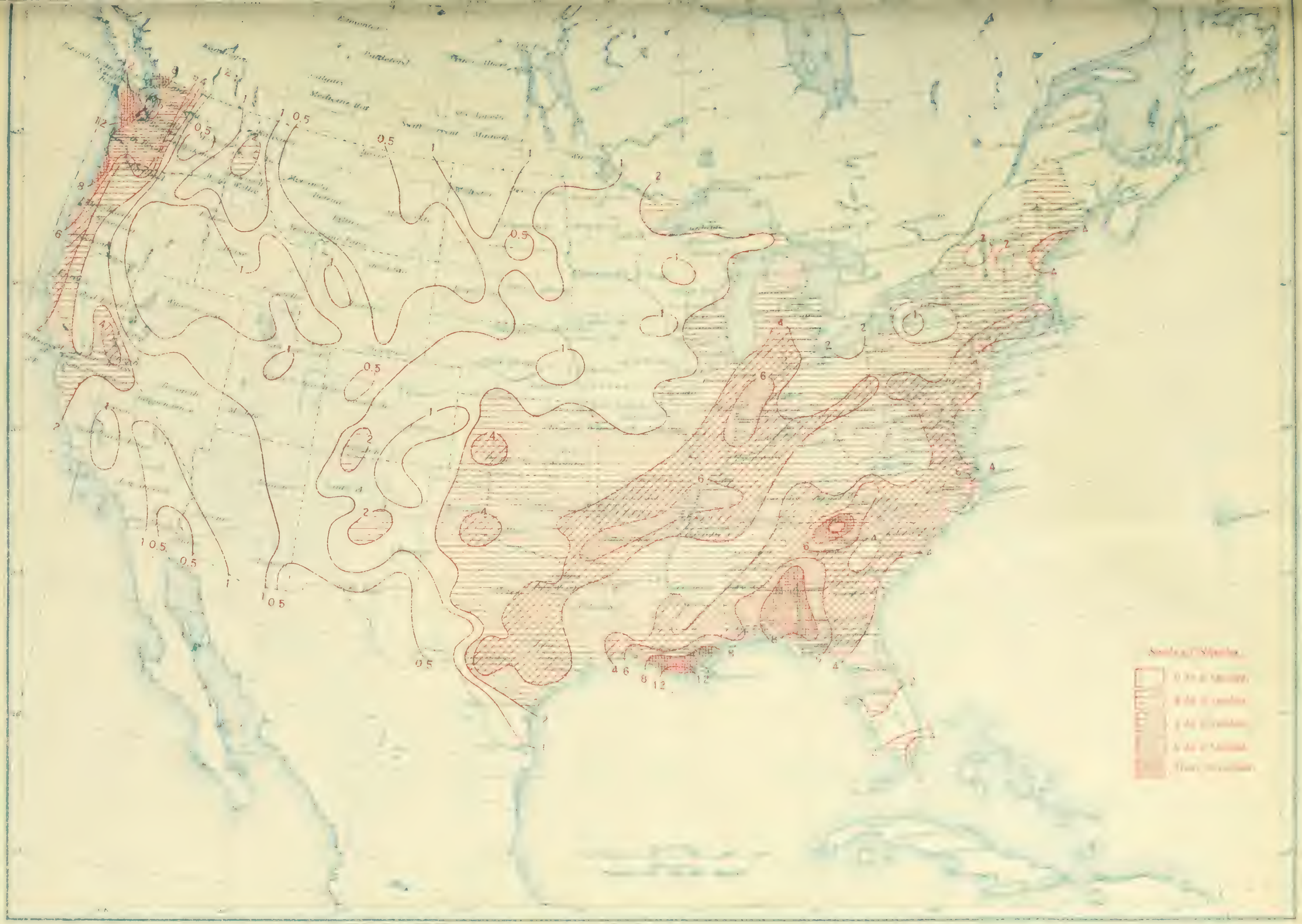
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for December, 1918.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	52	52	52	49	67	61	70	70	67	73	65	65	63	62	56	58	56	62	59	54	65	61	54	54	40	30	41	38	45	54	51	56.3
	Minimum	22	27	36	28	28	35	33	58	59	60	40	29	50	46	34	30	31	26	28	45	52	50	31	38	25	24	23	25	19	30	44	35.7
Blandville	Maximum	49	53	50	46	69	57	67	71	64	72	59	61	68	54	51	57	55	59	51	53	58	58	47	52	29	32	36	31	44	49	55	53.5
	Minimum	28	34	39	29	34	37	42	55	61	59	38	39	53	43	32	31	37	38	39	45	52	45	35	29	25	18	26	23	20	36	41	37.6
Calhoun	Maximum	51	51	49	48	66	63	69	68	66	71	68	50	68	65	53	59	55	61	57	52	58	63	57	50	37	34	39	33	43	49	50	54.9
	Minimum	24	33	36	27	29	33	38	58	59	59	37	32	47	45	32	33	33	30	33	44	49	49	34	36	25	23	24	23	19	31	43	36.1
Earlington	Maximum	51	53	51	49	69	59	70	74	67	73	62	59	71	57	55	61	55	65	56	54	59	66	48	53	32	26	39	32	44	51	59	55.5
	Minimum	24	29	39	31	27	36	37	60	61	61	34	58	40	44	33	30	33	29	31	46	53	48	34	32	26	25	25	24	20	32	47	37.1
Greenville	Maximum	49	50	53	49	68	66	.	74		75	70	51	71	57	54	60	54	65	56	52	65	67	65	58	59	34	39	36	43	53	53	[b]56.8
	Minimum	21	31	36	27	25	35	.	36	..	59	38	30	47	45	32	36	33	28	29	45	49	50	49	35	26	24	24	24	17	33	43	[b]34.7
Hopkinsville	Maximum	52	53	52	53	71	60	70	72	65	73	64	56	68	58	55	60	57	62	53	53	56	56	52	53	41	36	36	36	47	50	54	55.6
	Minimum	21	28	32	28	29	38	39	58	59	59	40	33	54	15	34	34	35	30	32	46	49	50	37	35	26	21	23	24	20	29	43	36.5
Marion	Maximum	48	50	49	51	55	61	67	68	66	70	60	60	69	56	50	59	54	61	52	53	56	59	53	53	33	33	35	33	43	43	51	53.3
	Minimum	28	32	38	28	32	35	40	42	57	58	37	36	52	43	32	37	35	33	37	44	52	48	36	33	19	19	26	23	20	35	43	36.5
Mayfield §§	Maximum	48	53	50	52	67	51	68	69	64	72	55	66	70	55	53	61	58	55	53	55	58	61	54	44	30	32	36	28	44	53	61	54.2
	Minimum	26	30	35	29	29	39	40	53	59	58	38	37	44	54	32	32	34	36	35	44	46	48	38	40	26	18	21	25	21	27	39	36.5
Owensboro	Maximum	50	48	48	46	64	65	66	68	66	75	65	53	67	56	63	57	62	60	59	52	60	70	53	58	45	37	38	31	40	47	50	55.5
	Minimum	26	32	35	29	33	37	37	55	59	59	49	34	47	45	34	35	34	33	34	48	45	50	38	35	24	24	24	24	20	31	44	37.2
Paducah (Lone Oak)	Maximum	50	53	55	50	55	62	72	73	70	75	69	54	70	64	56	58	59	60	64	53	57	66	58	55	36	32	36	35	44	44	53	56.1
	Minimum	25	33	34	30	31	33	42	42	61	57	37	38	50	34	33	33	38	39	34	44	52	46	38	32	26	18	26	21	30	36	43	36.6
Princeton §§	Maximum	53	50	..	50	67	54	68	73	64	71	53	64	70	50	51	52	55	60	52	55	..	60	..	..	33	27	37	..	44	53	59	[c]54.8
	Minimum	26	30	40	.	32	37	36	39	62	60	39	41	51	45	34	35	35	32	28	40	50	..	39	..	..	20	25	24	..	32	42	[c]37.5
Russellville §§	Maximum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	47	55	57	56	60	60	68	66	66	65	60	59	63	65	58	53	54	63	62	56	54	59	60	55	54	30	38	29	42	57	50	55.5
	Minimum	24	36	32	34	29	42	33	60	61	60	54	37	51	58	43	34	31	29	30	45	52	54	45	44	30	26	26	27	20	37	46	39.7
Anchorage	Maximum	54	45	47	42	59	56	63	64	62	68	61	48	66	64	51	56	51	61	64	50	54	62	50	50	32	27	33	32	41	52	51	52.1
	Minimum	20	25	39	27	22	27	31	54	56	57	32	27	45	42	30	28	30	25	27	42	47	42	31	32	24	21	16	23	21	23	43	32.5
Bardstown	Maximum	50	47	50	56	61	57	62	66	66	68	64	54	69	65	56	59	60	64	66	59	57	66	60	53	42	32	36	32	50	57	52	55.7
	Minimum	21	23	34	30	24	35	31	57	58	58	45	28	45	43	40	28	28	27	26	46	46	37	33	30	27	22	20	18	21	29	35	33.7
Bowling Green	Maximum	53	52	51	51	65	64	69	70	66	70	64	51	66	65	64	59	60	59	58	54	58	60	67	56	40	34	38	35	52	55	60	57.0
	Minimum	23	31	30	31	30	29	34	55	59	59	43	33	50	53	52	47	33	30	32	45	49	45	35	40	28	25	23	25	20	30	32	37.1
Edmonton	Maximum	53	.	.	.	..	64	65	..	66	66	64	..	66	63	49	54	..	60	.	59	57	58	63	56	40	52	37	45	43	50	55	[b]56.3
	Minimum	19	.	.	.	.	22	29	.	58	56	37	..	30	44	40	30	..	25	..	25	46	36	53	38	26	24	17	17	17	18	28	[b]32.0
Falmouth	Maximum	41	45	52	42	61	57	60	62	64	63	62	50	63	62	55	52	53	60	61	56	55	62	54	56	43	34	33	28	40	56	49	52.6
	Minimum	20	24	33	31	26	26	26	26	56	56	48	30	49	54	40	34	30	26	31	45	45	42	36	42	26	20	18	20	21	27	42	33.9
Frankfort	Maximum	48	46	50	45	57	56	61	65	65	65	64	48	68	65	54	54	53	56	57	52	58	61	53	54	42	30	35	33	38	53	51	52.8
	Minimum	24	24	32	32	29	36	30	57	57	58	42	31	47	53	42	24	34	30	29	44	47	52	32	41	28	22	23	25	24	24	44	36.4
Franklin	Maximum	46	50	47	46	59	60	63	65	64	68	63	57	63	63	58	56	53	57	51	54	58	67	52	56	38	37	41	33	46	51	55	54.1
	Minimum	23	33	38	30	29	38	39	58	58	58	42	35	57	47	40	32	32	29	33	47	52	49	36	36	27	23	24	24	21	33	45	37.7
Greensburg	Maximum	47	48	54	45	64	59	65	67	64	67	65	52	67	65	57	55	54	58	59	56	57	64	58	54	43	30	33	35	43	56	51	54.6
	Minimum	19	21	33	31	27	37	30	59	58	56	45	29	42	54	40	30	29	25	25	45	45	53	29	40	26	21	18	23	17	22	43	34.6
Irvington	Maximum	48	46	48	43	60	59	63	67	63	73	65	53	67	65	50	53	53	56	59	52	60	31	48	53	30	27	38	32	40	52	52	52.8
	Minimum	28	32	37	30	31	35	37	56	59	58	40	33	53	45	36	35	35	33	33	49	50	47	33	30	27	22	25	25	20	33	45	37.2
Junction City	Maximum	48	44	52	45	60	58	60	63	66	65	69	55	65	67	57	65	61	60	66	52	63	60	57	55	41	29	34	32	39	55	51	54.6
	Minimum	20	22	37	31	36	31	27	58	57	57	46	29	55	54	39	31	29	25	25	43	47	51	33	41	27	21	14	23	21	27	42	35.5
Leitchfield	Maximum	49	47	52	46	62	53	65	69	65	68	62	58	65	65	50	54	52	59	59	52	58	63	55	63	38	30	37	34	41	54	49	54.0
	Minimum	22	25	32	28	29	33	31	54	56	56	40	32	58	45	36	33	32	30	31	45	46	49	36	36	25	21	18	23	16	28	45	35.2
Lexington	Maximum	46	40	48	38	56	53	58	61	62	62	58	54	64	57	43	51	47	57	61	52	56	58	48	53	28	25	30	29	36	50	52	49.5
	Minimum	29	30	36	29	27	35	38	56	56	56	40	32	54	41	34	32	30	34	41	50	50	43	37	28	22	18	23	22	21	32	44	36.1
Loretto	Maximum	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Louisville	Maximum	49	46	47	41	60	55	62	64	64	67	57	53	66	58	52	56	52	54	59	52	58	61	50	51	29	27	34	31	39	51	59	51.7
	Minimum	32	34	38	29	29	38	37	57	59	57	40	35	53	42	38	36	36	35	38	48	51	44	40	29	25	22	25	24	23	32	48	37.9
Do (Cherokee Park)	Maximum	48	55	48	46	58	56	63	64	64	67	65	49	67	56	46	51	49	52	55	55	55	57	47	51	40	28	36	30	39	50	50	51.2
	Minimum	25	28	33	28	25	33	30	55	56	57	39	28	43	46	33	30	30	29	29	44	45	47	34	40	25	20	21	23	21	26	43	31.4
St. John	Maximum	47	48	50	45	60	57	63	68	64	67	62	48	65	64	50	54	51	59	59	54	57	64	54	52	34	27	36	32	41	54	50	52.8
	Minimum	21	25	35	29	29	30	32	55	57	58	42	31	45	48	38	33	32	30	30	45	47	52	33	33	26	22	19	24	17	28	44	35.2
Scott	Maximum	49	45	46	43	55	52	59	63	60	64	62	47	65	63	50	50	46	58	58	51	56	62	54	52	41	27	31	29	35	46	48	50.5
	Minimum	26	31	34	28	25	34	32	53	56	55	40	29	40	47	36	31	30	29	34	42	48	51	33	40	25	21	21	23	21	24	44	42.7
Shelbyville	Maximum	51	46	48	43	58	55	61	63	62	66	61	46	66	64	51	55	52	60	62	53	57	62	55	53	40	27	33	32	40	54	49	52.4
	Minimum	22	25	30	26	23	31	31	54	55	56	41	28	43	47	36	30	29	28	31	44	40	51	29	38	25	18	17	22	20	25	42	33.5
Taylorsville	Maximum	47	45	49	43	58	57	62	65	64	65	62	47	67	65	49	53	50	55	57	51	57	60	54	53	41	28	34	33	39	52	50	52.0
	Minimum	20	22	32	31	26	34	27	57	56	58	42	27	46	49	40	32	31	27	26	44	47	52	30	39	27	22	19	24	23	22	44	34.7
Williamstown	Maximum	53	44	46	42	56	55	59	64	61	63	62	53	65	64	54	52	52	59	60	50	55	63	55	54	40	38	34	51	37	50	48	52.9
	Minimum	31	31	34	28	35	32	32	55	57	57	40	31	42	41	34	32	31	30	34	42	42	51	36	39	29	21	21	21	21	26	56	35.2
Eastern Division.																																	
Beattyville	Maximum	51	47	55	45	63	59	62	67	65	70	63	52	68	65	55	57	50	63	64	56	57	64	57	60	31	33	39	33	40	61	51	54.9
	Minimum	17	19	23	34	27	38	24	46	57	55	19	35	47	54	43	35	26	24	24	40	45	51	33	30	30	25	15	26	23	16	39	33.9
Berea	Maximum			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum		..			..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	51	44	45	47	58	60	63	65	68	68	62	48	68	66	58	55	51	68	62	55	57	67	54	56	49	30	39	33	47	47	50	54.5
	Minimum	20	20	21	32	26	38	26	56	55	56	45	31	45	54	40	28	26	24	25	37	47	51	31	43	28	24	19	25	23	17	38	33.9
Harlan	Maximum	48	50	54	44	57	58	58	64	.	..	.	..	..	67	55	55	52	62	64	60	58	63	62	65	42	31	35	33	37	46	49	[e]52.7
	Minimum	23	24	24	32	25	38	28	54		.	.	.	..	43	45	42	33	26	28	44	48	51	41	38	22	21	20	22	27	30	31	[e]33.1
Maysville	Maximum	51	47	52	45	55	57	59	65	66	67	62	49	68	69	57	52	49	59	59	56	58	64	59	48	47	32	36	33	34	46	48	53.2
	Minimum	22	25	31	32	27	32	28	54	58	57	47	30	44	56	40	31	31	27	27	37	48	53	33	38	30	26	26	27	23	20	40	35.6
Mount Sterling	Maximum	50	41	53	40	56	56	61	61	65	65	62	57	65	63	51	51	46	57	65	54	56	62	51	56	44	28	35	33	36	56	52	52.5
	Minimum	25	24	25	30	26	35	31	54	54	55	36	29	29	50	39	31	29	29	30	44	48	46	33	41	26	21	16	24	22	23	33	33.5
Richmond	Maximum	52	44	52	42	58	58	60	62	64	64	62	49	65	65	58	55	50	60	64	56	57	63	58	57	49	29	35	33	39	54	50	53.7
	Minimum	26	29	32	30	27	34	33	55	56	55	47	30	46	54	48	31	30	28	34	45	47	52	35	43	25	21	19	23	20	28	42	36.3
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..							..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	42	51	54	58	62	55	68	68	68	68	66	62	67	66	57	54	56	59	63	57	60	63	58	61	48	29	28	28	40	50	58	55.7
	Minimum	21	24	32	26	25	35	28	62	58	62	55	38	54	56	42	39	28	26	28	47	48	53	35	48	28	26	15	26	26	30	46	37.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.



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CLIMATOLOGICAL DATA

KENTUCKY SECTION

ANNUAL, 1918

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 20, 1919

Climatological Data for the Year 1918.

Stations	Counties	Temperature (degrees Fahrenheit).							Precipitation (inches).								Number of days			Prevailing direction of wind.
		Elevation, feet.	Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall, unmelted.	With precip. of .01 in, or more.	Clear.	Pt. Cloudy.	Cloudy.	
WESTERN DIVISION.																				
Beaver Dam	Ohio	441	16	56.6	104	Aug. 11	-16	Jan. 21	16				1.45	Nov.			183[c]	83[c]	84[c]	s.
Blandville	Ballard	445	37	57.7	103	Aug. 11	-14	Jan. 12	40	44.02	6.99	April	0.81	July	39.9	99	117[a]	125[a]	122[a]	sw.
Calhoun	McLean	437	15	57.6	105	Aug. 10	18	Jan. 12	16	43.25	7.18	Aug.	1.14	Feb.	34.1	104	97[b]	166[b]	100[b]	sw.
Earlington	Hopkins	420	28	58.0	111	Aug. 11	-15	Jan. 12	29	34.15	5.70	May	0.91	July	27.5	103	209	7	149	se.
Greenville	Muhlenburg	519	2	58.6	111	Aug. 11	-15	Jan. 12	2	40.67	5.11	May	1.03	Nov.	37.3	91	170[g]	131[g]	57[g]	s.
Henderson	Henderson	327							11	34.32	5.37	Dec.	0.73	July	24.7	80				
Hopkinsville	Christian	524	22	59.0	107	Aug. 10†	-16	Jan. 12	22	36.71	5.84	Sep.	0.86	Feb‡	30.0	83	116	129	120	w.
Marion	Crittenden	571	20		108	Aug. 11	-17	Jan. 12	18											
Mayfield	Graves	364	9	57.0	106[a]	Aug. 11	-17	Jan. 13	9				0.43	July			103[j]	149[j]	103[j]	s.
Owensboro	Daviess	479	22	56.5	101	Aug. 10	-16	Jan. 12	22	35.34	4.94	Dec.	1.02	Feb.	24.7	94	171[a]	90[a]	103[a]	nw.
Paducah	McCracken	341	19	59.5	107	Aug. 13	-20	Jan. 12	30	46.91	7.10	Dec.	0.63	July	43.0	110	223	30	112	s.
Princeton	Caldwell	529	9		108	Aug. 11														
Russellville	Logan	590	6		105	Aug. 11	-15	Jan. 12												
CENTRAL DIVISION.																				
Alpha	Clinton	811	25	57.4	95	Aug. 6	-12	Jan. 12	25	56.92	9.91	Jan.	1.09	Mar.	38.4	86	154	70	141	w.
Anchorage	Jefferson	700	18	54.8	102	Aug. 5	-16	Jan. 12	18	39.91	5.17	Aug.	1.43	Mar.	25.6	106	202[b]	77[b]	84[b]	sw.
Bardstown	Nelson	637	22	56.3	106	Aug. 6	-14	Jan. 12	22	37.94	5.11	Jan.	1.59	Mar.	15.9	93	163	40	162	e.
Bowling Green	Warren	500	28	58.8	106	Aug. 10	-15	Jan. 12	29	38.43	7.10	Jan.	0.75	Mar.	20.0	105	167	123	75	w.
Brownsville	Edmonson	410							1	36.52	5.27	Jan.	1.22	June	24.3	122				
Burnside	Pulaski	773							26	49.01	9.18	Jan.	2.05	July	23.2	108				
Carrollton	Carroll	492							20	37.31	5.56	July	1.40	Feb.		125				
Cloverport	Breckenridge	375							5	39.44	8.25	July	1.11	Mar.	27.7	116				
Edmonton	Metcalfe	600	25		100	Aug. 11	-15	Jan. 12†	24											
Eubank	Pulaski	1,177	24	55.0	102	Aug. 6	-13	Jan. 12†	24	44.87	6.25	Jan.	1.26	Aug.	22.2	107	124	96	145	e.
Frankfort	Franklin	560	26	56.7	101	Aug. 5	-12	Jan. 12†	29	37.84	4.60	Dec.	1.58	Mar.	13.1	117	159	52	154	s.
Franklin	Simpson	691	23																	
Greensburg	Green	581	26	55.4	97	June 16†	-16	Jan. 21	30	37.30	5.51	Oct.	1.62	Nov.	18.5	120	86	70	209	n.
High Bridge	Jessamine	762							16	39.06	5.37	Jan.	1.67	Feb.	26.5	126				
Irvington	Breckinridge	646	21	56.9	100	Aug. 5	-15	Jan. 12	21	35.38	5.86	May	1.24	Nov.	26.5	91	179	58	128	sw.
Junction City	Boyle	985	25	56.1	101	Aug. 6	-14	Jan. 12†	25	42.63	5.69	Jan.	1.55	Aug.	23.5	148	138	106	121	sw.
Leitchfield	Grayson	635	23	56.3	103	Aug. 11	-16	Jan. 12	23	37.65	5.70	Dec.	0.23	Mar.	28.5	94	156	123	86	sw.
Lexington	Fayette	989	31	55.2	100	Aug. 6	-14	Jan. 12	31	35.50	4.83	Dec.	1.41	Sep.	22.7	133	121	117	127	sw.
Loretto	Marion	681	19		105	Aug. 6	-16	Jan. 12	19											
LOUISVILLE	Jefferson	525	46	56.5	105	Aug. 5	-15	Jan. 12	45	36.11	4.99	May	1.19	Nov.	25.6	112	126	113	126	n.
Do (Cherokee Park)	Jefferson	534	9	54.9	97	Aug. 5	-16	Jan. 12	9	39.59	5.05	May	0.49	Feb.	27.6	107	164	90	111	s.
St. John	Hardin	777	22	55.0	102	Aug. 5	-16	Jan. 12	22	41.13	6.40	July	1.50	Nov.	24.7	127	227	50	88	
Scott	Kenton	900	21	54.5	102	Aug. 5†	16	Jan. 12	21	38.69	4.48	June§	1.71	Nov.	26.3	120	118	123	124	s.
Shelbyville	Shelby	825	30	54.7	106	Aug. 6	-16	Jan. 12†	30	38.44	5.61	May	1.54	Mar.	27.8	122	147	112	106	s.
Taylorsville	Spencer	489	16	55.0	103	Aug. 5	18	Jan. 21	16	37.96	5.31	Dec.	1.35	Sep.	22.9	130	141	89	135	sw.
Williamstown	Grant	943	16	55.4	105	Aug. 6	-15	Jan. 12†	16	35.94	4.88	Jan.	1.70	Mar.	32.0	120	107	122	136	
Woodbury	Butler	533							1	36.33	4.39	July	1.53	Nov.	21.0	104				
EASTERN DIVISION.																				
Beattyville	Lee	650	15	56.0	102[a]	Aug. 6	14	Jan. 21	16	44.25	5.99	July	1.32	Nov.	19.4	135	151	78	136	w.
Berea	Madison	1,070	17				-14	Jan. 21												
Catlettsburg	Boyd	534							30	34.62	4.23	Mar.	1.34	Nov.		117				
Cynthiana	Harrison	684							1	42.26	5.70	May	2.15	Nov.	17.4	90				
Falmouth	Pendleton	600							30	38.98	5.45	June	1.85	Nov.	21.3	118	156	65	144	
Farmers	Rowan	668	11	54.9	101	Aug. 6	-16	Jan. 21	12	41.16	5.75	April	2.12	Feb.	17.0	100	209	43	113	w.
Jackson	Breathitt	776							7	39.39	4.94	May	1.30	Aug.		94				
London	Laurel	1190							4	60.41	8.19	June	2.15	Nov.	14.2	133				
Louisa	Lawrence	584							15	35.15	4.70	June	1.00	Nov.		134				
Maysville	Mason	524	21	54.9	104	Aug. 6	-16	Jan. 21	21	41.65	5.02	July	2.19	Feb.	27.3	125	195	53	117	e.
Middlesboro	Bell	1,128	21				-4	Jan. 12												
Mount Sterling	Montgomery	930	29	54.6	100	Aug. 6	-13	Jan. 12	29	41.95	5.16	Dec.	2.39	Feb.		125	199	35	131	w.
Pikeville	Pike	634							13		7.16	June	1.80	Nov.	21.2					
Richmond	Madison	926	24	56.3	103	Aug. 6	-13	Jan. 12	26	36.91	4.96	Dec.	1.38	Mar.	28.9	123	172	66	127	
Weeksbury	Floyd	1,216	4				-2	Jan. 13	4											
Williamsburg	Whitley	939	21	57.2	100	Aug. 6	-11	Jan. 21	23	47.86	7.31	Jan.	1.60	Nov.	27.2	124	143	84	138	w.

All temperature data are taken from self-registering thermometers.
Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents 2 days, etc
†Also on other dates.

‡ Also in March.
§ Also in December.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIII. Louisville, Ky., Annual, 1918. No. 13

GENERAL SUMMARY.

The average temperature for the State for the year 1918 was nearly normal, but there were four very cold months, two of them, January and September, the coldest of record; and six abnormally warm months. Precipitation was below normal, but on the whole was ample, except during the months of June, July, and, especially, August, when droughty conditions prevailed over considerable portions of the State. The heavy snows of January, covering the ground during that extraordinarily cold month, were exceedingly beneficial to winter grains; and when the snow disappeared about February 9th, these grains came from under the snow in splendid condition. February, after the 6th, and March were exceptionally warm and favorable. At the end of March wheat, rye, and pastures were in excellent condition, and rapid progress had been made in plowing and the preparation of the soil for the spring crops. April, on account of low temperature, high winds, frequent showers, and lack of sunshine, was decidedly unfavorable for germination, growth, and development of vegetation, besides delaying corn planting. May, after the first two days, was warm and humid, and all crops made rapid development, although wet soil interfered considerably with corn planting. Grains and all grasses were in excellent condition at the end of the month. The June conditions were especially favorable for harvesting, but not otherwise favorable, for the temperatures, especially at night, were too low, and it was too dry, tobacco interests suffering from the latter cause. July, on account of the low temperatures and dryness, and August, on account of extreme heat and long duration of droughty conditions, were notably unfavorable,—especially August, when irreparable damage was done to early planted corn and to tobacco and gardens. Rains, the latter part of that month, broke the drought and practically saved late crops of corn, tobacco and potatoes. September, the coldest September on record, was decidedly unfavorable on account of retarding the development and maturing of crops of late corn and tobacco, although these crops were improved by the rains of that month. October was exceedingly favorable, with temperatures above normal nearly every day, and no frosts of consequence. Late corn and tobacco matured and were harvested in good time. Gardens produced during the entire month, and there was a marked improvement in late potatoes. Favorable weather continued during November, permitting the gathering of corn, completion of sowing wheat and curing of tobacco. The first killing frost of the season occurred generally on the 2d of November. December was an unusually warm month with little or no snow. Wheat and rye grew steadily during the greater part of the month.

THE WEATHER BY MONTHS.

January.—This was by far the coldest month on record in Kentucky, the average temperature for the State being more than 5° lower than for any other month since State records were begun. Temperatures were below zero on 10 days or more at most stations. The 12th, with temperatures ranging from 12° to 20° below zero and wind velocities of 30 to 40 miles per hour, was perhaps the most severe winter day experienced in this State in half a century. Several heavy snowstorms occurred during the month, and all transportation systems were much obstructed. Also, the fuel shortage added to the difficulties of the situation. The total snowfall was the heaviest ever known in this State. Snow covered the ground during most of the month, protecting the winter grains.

February.—The temperature for the State averaged above normal, the first time for any month since January, 1917. The weather conditions during the first few days of February were severe, but there was a decided reaction on the 6th, and during the rest of the month mild weather prevailed, except on one or two days. The snow practically disappeared by the 9th. Winter grains came from under the snow in splendid condition, and during the mild weather that followed the disappearance of the snow considerable growth occurred. Thunderstorms occurred in the central counties on the 12th, 14th, 19th, and 25th.

March.—Weather conditions during March were exceptionally favorable for outdoor activities and the growth of vegetation. Temperatures were above normal during most of the month, and freezing temperatures were registered on only a few nights. By the end of the month, wheat and rye had advanced rapidly; pastures were in excellent condition, and plowing and preparation of soil were proceeding.

April.—Unseasonably low temperature, high winds, showers almost daily during the last half of the month, and an unusual amount of cloudiness, even for April, were the principal features of the month's weather. Snow occurred on the 10th, accompanied by temperatures of 25° to 30°. Killing frosts were general in the western counties on the 13th, and in the eastern counties on the 14th. Cool, cloudy weather retarded germination and checked the growth of vegetation. Wet soil during the last two weeks hindered farm operations, especially corn planting.

May.—The first two days were unseasonably cold, with freezing temperatures at a number of stations, frost occurring on the 2d. The damage, however, was mostly confined to early potatoes and beans. During the rest of the month seasonable temperatures prevailed, and plant growth was rapid, especially during the last week. Rainfall was frequent, and warm humid weather caused wheat and rye to develop rapidly, the month ending with the winter grain crops in such excellent condition as to equal or approach the best results ever obtained in this State. Also, pastures, clover, alfalfa, and all grasses were in exceptionally good condition. Wet soil interfered with corn planting, but was favorable for transplanting tobacco. Much corn had to be replanted on account of bad seed.

June.—Weather conditions during the month were exceptionally favorable for harvesting wheat, rye, alfalfa, and clover; but was unfavorable for growing crops, being too dry and cool. Considerable drought conditions were experienced, and were particularly distressing to tobacco interests. There was some compensation, however, in the ideal weather for harvesting and for cultivation of corn.

July.—The weather during the month was generally unfavorable for the proper development of corn and tobacco, being too cool and dry. It was quite favorable, however, for the cultivation of these crops, and for threshing and hay harvest. Serious drought conditions persisted through the month in most of the western counties. Crops, especially corn, were greatly damaged in that district. There were practically no warm nights, a peculiar and unusual feature for July in this State.

August.—The weather during this month was characterized by extreme heat and drought of long duration, causing extensive damage to crops. Maximum temperatures reached 111° at two stations in the western counties, breaking all records except for the memorable heat wave of July, 1901. With the exception of a few local showers, no rain of consequence occurred until the 25th, when general rains set in and continued for several days, effectually breaking the drought in most localities. The intense heat caused great damage to early corn, reducing the yield at

Highest Monthly Temperatures for the Year 1918, with Dates.

Stations	January.		February.		March.		April.		May.		June		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
WESTERN DIVISION.																								
Beaver Dam	51[o]	26[o]	82	28	82	13†	80	2†	92	30	98	17	98	23	104	11	87	2†	90	5	74	6	73	10
Blandville	53	26	79	28	81	13†	81	2†	89	30	101	17	95	24†	103	11	86	3	85	5	71	6†	72	10
Calhoun	51	26	79	28	82	13†	79	2†	91	28†	101	17	98	24	105[b]	10	86	3	88	5	72	6	71	10
Earlington	54	25	81	28	84	13	85	16	96	28	104	17	100	23	111	11	92	10	91	5	77	6	74	8
Greenville	55	25	80	28	82[d]	13	87	3	93	28†	102a	17†	99[a]	23	111	11	87a	3	89[a]	5	74a	6	75[b]	10
Hopkinsville	54	25	80	28	85	13	85	2†	94	29†	104	17	102	6	107	10†	89	3	91	6	74	4†	73	10
Marion	54	25	79	28	80	13†	82	2	92	28	103	17	99	23	108	11	......	......	......	......	73	6	70	10
Mayfield	55[e]	25	79[i]	28	81	22	81	2	90[a]	28†	103	17	96	7†	106[a]	11	85	3	89	6	73	4	72	10
Owensboro	47	5†	79	28	84	9	81	16	91	30	99	17	95	6	101	10	83	10	86	5	72	16	75	10
Paducah	57	27	81	28	82	13†	85	16	94	27	103	17	103	26	107	13	88	14	88	4†	72	6	75	10
Princeton	......	......	......	......	......	......	84	2†	95	30†	101	16	99[b]	23	108	11	87[b]	3	87a	5	73	6	73	8
Russellville	52	25	79	28	82	22	79	2†	93	31	101	17	97	5	105	11	91	3	......	......	......	......	......	......
CENTRAL DIVISION.																								
Alpha	55	25	73	28	77	5	78	25	87	31	93	16	90	5†	95	6	83	3	83	6	70	6	68	7
Anchorage	45	6†	78	28	79	22	78	2†	93	31	99	17	93	4†	102	5	84	2†	88	5	72	6	68	10
Bardstown	50	26	78	28	81	22	81	2†	95	28	102	17	96	4†	106	6	91	3	90	4†	74	6	69	13
Bowling Green	53	25	83	28	85	13	83	2†	97	31	102	16	99	4†	106	10	91	3	91	5	73	6†	70	8†
Edmonton	51[e]	27	77[d]	28	80[k]	13†	79[g]	16	......	......	98[g]	16†	95[g]	5	100[m]	11	88[c]	2†	......	......	73[c]	6	66[h]	9
Eubank	51	26	74	28	78	22	77	2†	90	31	98	17	92	5†	102	6	89	1	84	5†	70	6†	64	9
Frankfort	47	6	76	28	79	9	76	2†	94	31	97	17	94	28	101	5	86	2	86	5	70	16	68	13
Franklin	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	88[c]	4†	72	8	68	10
Greensburg	51	26	78	28	80	9†	80	2†	93	31	97	16†	97	5	97	6†	87	2†	86	6	72	16	67	8†
Irvington	49	26	78	28	79	13	78	2†	91	28†	95	17	94	26	100	5	84	2	86	5	70	16	73	10
Junction City	52	26†	77	28	80	22	77	2†	92	28	99	17	94	5†	101	6	88	3	88	5	72	6	69	11
Leitchfield	50	25	79	28	82	13†	79	16	92	28†	97	16†	97	6	103	11	85	2	86[h]	5	72	16	69	8
Lexington	47	26	75	28	77	9	75	2	91	28	94	16	90	4	100	6	84	2	84	5	68	16	64	13
Loretto	50	4	78	28	82	9	80	3	94	27	100	17	96	4†	105	6	88	2†	80[f]	6†	......	......	......	......
LOUISVILLE	47	6	77	28	79	13	78	2	92	28	96	16	95	4	105	5	83	9	86	5	70	16	67	10
Do (Cherokee Park)	45	6	78	28	80	13	81	2†	89	31	94	17	89	4†	97	5	80	2	84	5	70	16†	67	10†
St. John	50	25	78	28	80	13†	80	16	94	28	99	18	95	4†	102	5	85	2	87	5	71	16	68	8
Scott	44	6	74	28	77	9†	78	2	90	31	94	16	94	4	102	5†	84	9	85	5	69	6	65	13
Shelbyville	45	25	75	28	79	22	77	2†	91	31	98	17	96	28	106	6	86	2	88	5	72	6	66	10†
Taylorsville	45	6†	76	28	78	13	77	16	92	30†	96	16†	93	24†	103	5	84	2†	86	5	70	16	67	13
Williamstown	45	25	75	28	80	22	79	3	92	29†	95	16†	95	28	105	6	87	3	87	5	72	6	65	13
EASTERN DIVISION.																								
Beattyville	53	25	77	28	81	13†	84	2	94	29†	99	17	94	5	102a	6	90	3†	89	5†	75	6	70	10
Berea	54	26	76	28	79	22	79	2	93	28	98	17	93	5	......	......	85[c]	4	......	......	......	......	......	......
Farmers	48	6†	79	28	80	22	79	2	92	30	92	1†	90	21	101	6	87	2†	89	5	70	6†	68	9†
Harlan	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	86	2†	84	1†	76[e]	8	67[e]	14
Maysville	48	24	76	28	80	21†	86	2	96	31	99	17	95	22	104	6	89	4	89	5	70	17	69	14
Middlesboro	62	29	71	28	77	4†	79	25	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Mount Sterling	46	6†	75	28	77	22	78	2	94	29†	97	16†	93	5	100	6	87	2†	87	5	69	6	65	9†
Richmond	46	6†	72	28	76	22	76	15	92	28†	97	17	94	5	103	6	87	4	87	5	71	6	65	13†
Weeksbury	62	28	79	28	78	23	81	2	90	29†	93	1	......	......	......	......	......	......	83	15	75	7	......	......
Williamsburg	52	27	78	28	79	5†	82	19	92	29†	98	17	92	5†	100	6	87	4	85	2	72	17	68	7†

† Also on other dates.

least one-half in many localities. Early tobacco was badly damaged and had to be cut in order to save it, Gardens were generally burned up. Rains of the last week came too late for early crops, but were of great benefit to late corn, tobacco and potatoes, and also put the soil in condition for fall plowing.

SEPTEMBER.—This was by far the coldest September since Weather Bureau records were begun. The persistent cold, with low maximum as well as low minimum temperature, suggested October instead of September weather. At Louisville there was only one day when the average temperature was as high as normal. Precipitation was near normal. While considerable improvement occurred as a result of the rains, the unseasonable cold retarded the development of crops, and they matured slowly, particularly late corn and tobacco. Rapid progress was made in fall plowing.

OCTOBER.—Exceptionally favorable weather conditions prevailed during the entire month, counterbalancing to a considerable extent the unseasonably low temperatures of September. Temperatures were above normal nearly every day. Late corn and tobacco matured and were harvested in good time. Corn was greatly improved by the October weather. Gardens continued producing until the end of the month. Seeding of winter wheat progressed rapidly.

NOVEMBER.—Favorable weather conditions prevailed during the month, particularly on account of the dryness. No injurious freezes occurred, and there was only a brief period during the last week that was sufficiently cold to check growth. The first killing frost of the season occurred generally on the 2d, an unusually late date for this State.

DECEMBER.—High average temperature and unusually light snowfall were the noteworthy features of the month's weather. During the first three weeks minimum temperatures were more frequently above than below freezing. Wheat and rye grew steadily during the mild weather. The early sown covered the ground with a dense sod, presenting an appearance rarely seen in this State in December. The long period of growing weather favored the late sown grain—an important part of the crop this year—and largely compensated for the lateness in planting. There was practically no snow covering.

ERRATA.

Annual, 1917:

Berea: December, 1917, monthly mean temperature 28.5.

Blandville: December, 1917, monthly mean temperature 28.5.

Lowest Monthly Temperatures for the Year 1918, with Dates.

Stations	January		February		March		April		May		June		July		August		September		October		November		December	
	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date	Minimum	Date
WESTERN DIVISION.																								
Beaver Dam	−16c	21	− 2	5	25	2†	29	10†	34	2	42	23	50	2	51	22	32	[illegible]	35	15	24	[illegible]	19	29
Blandville	14	12	5	4†	25	10	28	9	37	1	53	23	56	1†	57	1	30	21	16	31	[illegible]	[illegible]	18	[illegible]
Calhoun	18	12	1	4†	24	10	27	10	35	2	46	23	52	9	55	3	35	21†	[illegible]	31	[illegible]	[illegible]	19	[illegible]
Earlington	15	12	1	5	25	10†	30	10†	34	1	46	23	50	9	53	1†	36	20†	[illegible]	15†	[illegible]	[illegible]	20	[illegible]
Greenville	15	12	2	4	25b	2†	29	10†	31	2	47a	23	50a	9	54	1	31	[illegible]	[illegible]	31	[illegible]	[illegible]	17b	[illegible]
Hopkinsville	16	12	3	5	26	10	30	10	36	2	51	24	52	9	54	1†	36	21	36	31	[illegible]	30	[illegible]	[illegible]
Marion	17	12	− 1	5	24	2†	27	13	35	1†	48	23	47	9	50	1		......			[illegible]	[illegible]	[illegible]	[illegible]
Mayfield	−17c	13	1	5	21	10	30	10	37a	1†	51	23	50	9	54a	2	36	20	[illegible]	[illegible]	25	[illegible]	18	26
Owensboro	16	12	− 3	5	25	10†	29	10	38	1	51	23	54	2	54	1	38	22	37	31	[illegible]	[illegible]	20	29
Paducah	−20	12	5	4†	25	10	28	10	37	1	55	23	54	9	56	1	38	21	[illegible]	31	28	13†	18	[illegible]
Princeton		....	....	....	....	....	29	10	34	2	50	23	51b	3†	54	1	37b	21	36a	31	22	30	20	26
Russellville	15	12	5	4	26	2	29	10	33	2	44	25	50	2	54	1†	37	21†						
CENTRAL DIVISION.																								
Alpha	12	12	10	4†	28	16	29	10	34	2	47	23	52	2†	55	1	36	22	38	15	26	24	20	[illegible]
Anchorage	−16	12	− 8	5	23	2†	26	10	31	2	37	23	47	9	51	1	32	22	35	11	19	30	16	27
Bardstown	14	12	0	5	22	11	27	10†	31	2	39	23	49	9	52	1	31	22	36	15	21	30	18	28
Bowling Green	−15	12	6	4†	24	11	29	10	35	2	48	23	53	2†	56	1	37	22†	40	16†	26	24†	20	29
Edmonton	15c	12†	5d	5	21k	11	28g	10	....	......	46g	23†	47g	7	57m	31	32e	22			21c	29	17	27
Eubank	13	12†	3	5†	24	11	27	10	30	2	42	23	46	9	51	1	31	22	34	15	22	26	18	27
Frankfort	12	12†	0	5	24	11	29	10	34	2	46	23	52	9	55	1	36	22	36	15	24	26	22	26
Franklin	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	38	15	25	30	21	29
Greensburg	−16	21	2	5	23	11	28	10†	29	2	46	24	47	2	55	2	30	22	32	15	20	30	17	29
Irvington	15	12	3	5	24	10	27	10	38	1†	45	23	53	9	50	1	37	22	41	31	26	26	20	29
Junction City	14	12†	2	5	20	11	28	5	28	2	44	23	51	2†	55	1†	30	22	34	15	21	14	14	27
Leitchfield	16	12	2	5	24	10†	27	10	34	2	44	23	50	2	54	1	35	22	38	15†	22	30	16	29
Lexington	14	12	− 1	4	23	10	26	10	36	1	48	23	55	31	63	20	40	27	38	31	24	25	18	26
Loretto	−16	12	2	5	17	11	27	10	29	2	40	23	48	2	50	1	41	23†	33f	31				
LOUISVILLE	15	12	0	4	24	10	27	10	38	1	50	23	56	31	61	1	42	22	41	31	28	25	22	26
Do (Cherokee Park)	−16	12	− 4	4†	22	2†	25	10	34	2	44	23	52	9	55	1	36	22	36	29	23	26	20	26
St John	−16	12	− 5	5	24	10†	28	10†	32	2	40	23	50	2†	54	1	34	22	35	29	24	25†	17	29
Scott	16	12	8	5	19	16	26	10	36	1	45	23	49	9	55	1	34	22†	38	15	21	26	21	26†
Shelbyville	−16	12†	− 3	4	22	8	26	10†	32	2	40	23	48	9	51	1	32	22	37	14	20	26	17	27
Taylorsville	18	21	− 3	5	22	11	27	10	29	2	40	23	50	11	52	1	31	22	32	15	22	26†	19	27
Williamstown	−15	12†	5	5	22	11	26	10†	36	2	42	23	50	9	56	1	40	21†	38	14	23	25	21	26†
EASTERN DIVISION.																								
Beattyville	−14	21	3	5	20	11	29	10†	32	2	46	23	50	2	57	1†	36	22†	33	15	20	30	15	27
Berea	−14	21	3	5	24	11†	27	10	30	2	41	23	49	2†	..		32e	22						
Farmers	−16	21	− 2	4	19	11	26	10	36	3	45	23†	49	2†	52	1	32	23	34	15	19	26	17	30
Harlan	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	40	22	37	16	24e	2	20e	27
Maysville	−16	21	5	5	20	11	28	10†	33	2	48	8†	47	2	57	1	38	22	35	22	21	26	20	30
Middlesboro	4	12	8	5	24	11	29	11†	....	....	....	....	....	....	....	....	....	....	....	....	....	....		
Mount Sterling	13	12	0	5	23	11	26	10†	33	2	44	23	49	9	53	1	34	22	35	15	22	24†	16	27
Richmond	−13	12	3	4†	24	11	27	10	35	2	47	23	52	9	57	1	37	22†	38	15	23	26	19	27
Weeksbury	2	13	6	5	25	10	30	10	45	14	50	26	....	....	....	....	....	....	35	23	20	26†		
Williamsburg	−11	21	8	5†	26	16†	29	10†	33	2	49	14†	52	2†	56	25	37	21†	35	15†	24	25†	15	27

† Also on other dates.

COMPARATIVE ANNUAL DATA FOR KENTUCKY.

Year.	Temperature. Mean.	Temperature. *Departure	Temperature. Highest.	Temperature. Lowest.	Precipitation. Average.	Precipitation. *Departure
1889	55.6	−0.7	101	3	35.97	− 9.16
1890	57.1	+0.8	101	4	58.82	+13.69
1891	56.3	0.0	105	0	49.69	+ 4.56
1892	55.3	−1.0	101	− 6	44.25	− 0.88
1893	55.5	−0.8	101	−22	44.71	− 0.42
1894	57.1	+0.8	105	−12	34.81	−10.32
1895	55.0	−1.3	104	−18	38.47	− 6.66
1896	57.6	+1.3	106	−12	44.68	− 0.45
1897	57.2	+0.9	107	−16	46.72	+ 1.59
1898	57.2	+0.9	103	−12	52.38	+ 7.25
1899	56.4	+0.1	105	−33	46.38	+ 1.25
1900	57.7	+1.4	104	− 9	44.40	− 0.73
1901	55.3	−1.0	112	−22	35.65	− 9.48
1902	56.5	+0.2	107	− 3	44.35	− 0.78
1903	55.8	−0.5	104	−16	41.16	− 3.97
1904	55.3	−1.0	100	− 9	35.10	−10.03
1905	55.8	−0.5	106	−16	47.68	+ 2.55
1906	57.0	+0.7	100	−12	48.84	+ 3.71
1907	56.1	−0.2	102	−11	47.76	+ 2.63
1908	57.7	+1.4	104	2	41.94	− 3.19
1909	56.5	+0.2	104	−14	51.36	+ 6.23
1910	55.3	−1.0	100	−20	50.67	+ 5.54
1911	58.0	+1.7	106	−16	46.77	+ 1.64
1912	54.6	−1.7	100	−20	47.93	+ 2.80
1913	57.9	+1.6	109	− 2	47.46	+ 2.33
1914	56.3	0.0	109	−16	41.80	− 3.33
1915	56.2	−0.1	102	0	51.92	+ 6.79
1916	56.2	−0.1	102	−14	45.49	+ 0.36
1917	53.5	−2.8	100	−21	46.01	+ 0.88
1918	56.5	+0.2	111	−20	40.64	− 4.49

*Compared with 30 years' normal

KILLING FROSTS, 1918.

STATIONS.	Last in Spring.	First in Autumn.	STATIONS.	Last in Spring.	First in Autumn.
WESTERN DIVISON					
Beaver Dam	April 13	Nov. 2	Irvington	April 13	Nov. 2
Blandville	do 10	do 2	Junction City	May 2	do 2
Calhoun	do 13	do 2	Leitchfield	April 13	do 2
Earlington	do 13	do 2	Lexington	do 13	do 2
Greenville	do 13	do 2	Loretto	May 2	do 2
Hopkinsville	do 13	do 2	Louisville	April 13	do 2
Marion	do 13	do 2	Cherokee Park	do 13	do 2
Mayfield	do 10	do 2	St. John	do 13	do 2
Owensboro	do 13	do 2	Scott	do 14	do 2
Paducah	do 10	do 2	Shelbyville	do 14	do 2
Princeton	do 13	do 2	Taylorsville	May 2	do 2
Russellville	do 13	do 2	Williamstown	April 14	do 2
CENTRAL DIVISON			EASTERN DIVISON		
Alpha	April 14	Nov. 2	Beattyville	April 14	Nov 2
Anchorage	do 14	do 2	Berea	do 14	do 2
Bardstown	May 2	do 2	Farmers	do 14	do 2
Bowling Green	April 13	do 2	Maysville	do 14	do 2
Edmonton	do 14	do 2	Middlesboro	do 14	do 2
Eubank	May 2	do 2	Mount Sterling	do 14	do 2
Frankfort	April 14	do 2	Richmond	do 14	do 2
Franklin	......	......	Weeksbury	do 14	do 2
Greensburg	May 2	do 2	Williamsburg	do 14	do 2

Monthly and Annual Precipitation for the Year 1918, with Departures from the Normal.

Stations.	January		February.		March		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
WESTERN DIVISION.																										
Beaver Dam	....	......	1.57	-1.81	1.55	-2.36	3.75	-0.36	4.17	+0.39	2.02	-1.41	3.23	-1.16	3.16	-0.18	2.16	-0.36	3.25	+0.81	1.45	-1.41	3.67	-0.28	.....	......
Blandville	5.46	+0.83	1.01	-3.52	1.44	-3.19	6.99	+2.46	6.37	+2.13	2.07	-2.29	0.81	-3.08	1.24	-1.90	6.87	+3.72	4.14	+1.14	1.64	-2.43	5.98	+2.05	44.02	- 4.08
Calhoun	4.71	-0.38	1.14	-2.26	1.80	-2.17	3.80	-0.68	4.47	+0.86	4.93	+1.30	2.05	-2.54	7.18	+3.82	2.81	+0.21	3.40	+0.12	1.48	-1.63	5.48	+1.31	43.25	- 2.04
Earlington	3.17	-0.96	1.10	-2.90	1.58	-3.93	4.50	+0.18	5.70	+0.69	4.02	+0.49	0.91	-3.19	2.27	-1.05	2.12	-0.93	2.62	+0.05	1.55	-2.19	4.61	+0.80	34.15	-12.94
Greenville	4.89	......	2.05	......	1.60	......	4.09	......	5.11	......	3.61	......	3.16	......	2.60	......	2.59	......	4.88	......	1.03	......	5.06	......	40.67	......
Henderson	3.43	-0.30	1.32	-1.43	0.84	-3.94	4.64	+1.21	3.66	0.20	3.65	-0.58	0.73	-3.03	3.35	+1.05	3.79	+1.24	1.91	-1.19	1.63	-2.11	5.37	+1.36	34.32	- 7.92
Hopkinsville	4.75	-0.38	0.86	-3.03	0.86	-3.98	4.78	+0.43	3.52	-0.71	3.15	-1.13	0.94	-3.09	1.42	-1.63	5.84	+2.81	3.36	+0.49	1.79	-2.36	5.44	+0.67	36.71	-11.91
Marion	5.92	+1.12	1.04	-2.33	1.19	-3.60	5.22	+0.64	4.75	+0.46	4.24	+0.59	0.95	-2.98	4.89	+2.10	.....	.....	.....	.....	1.69	-2.03	5.46	+1.64	......	....
Mayfield	....	......	1.30	......	0.80	......	6.54	+2.40	5.88	+1.53	2.10	-0.50	0.43	-4.22	3.55	+0.31	2.60	-0.23	2.77	+0.22	2.15	-2.05	3.36	......	......	....
Owensboro	3.40	-1.11	1.02	-2.23	2.11	-2.67	3.91	-0.19	4.08	+0.24	3.11	-0.46	2.67	-1.18	1.72	-1.87	3.42	+0.60	3.02	-0.08	1.94	-1.51	4.94	+1.08	35.34	- 9.38
Paducah	6.74	+1.97	1.10	-2.50	2.17	-2.26	5.74	+1.37	6.18	+2.33	3.46	-1.01	0.63	-3.41	3.51	+0.26	5.04	+2.07	3.37	+0.64	1.87	-1.91	7.10	+3.32	46.91	+ 0.87
Princeton	....	....	....	....	....	.....	6.69	+3.12	7.00	+1.77	6.04	......	2.95	-0.46	6.08	+2.55	3.41	+0.67	3.38	+1.28	2.07	-1.98	3.75	-0.34	......	....
Russellville	4.72	....	2.00	....	0.57	...	4.29	-0.84	3.49	......	1.82	....	1.28	-3.73	1.37	-1.16	2.54	-0.54	.....	.....	.....	.....	.....	.....	.....	....
CENTRAL DIVISION.																										
Alpha	9.91	+5.06	2.80	-1.70	1.09	-5.08	7.75	+2.48	5.35	+1.47	1.86	-3.18	5.33	-0.37	4.10	-0.23	3.31	+0.15	6.48	+4.05	3.45	-0.28	5.49	+0.75	56.92	+ 3.12
Anchorage	4.00	+0.34	2.27	-0.87	1.43	-2.55	2.85	-1.13	4.97	+1.24	3.61	-0.04	3.55	-0.95	5.17	+1.59	2.55	-0.26	2.99	+0.13	1.83	-1.14	4.69	+0.69	39.91	- 2.95
Bardstown	5.11	+0.28	2.04	-1.87	1.59	3.10	2.88	-0.99	4.57	+1.04	2.45	-1.89	4.65	+0.17	2.44	1.17	2.40	-0.50	3.57	+1.17	1.65	-1.73	4.59	+0.23	37.94	- 8.36
Bowling Green	7.10	+2.46	1.58	-2.57	0.75	-4.17	3.45	-0.81	3.41	-0.84	1.36	-2.51	3.48	0.98	2.95	-0.57	2.34	-0.79	4.01	+1.64	1.75	1.86	6.25	+1.93	38.43	- 9.07
Brownsville	5.27	....	2.47	......	2.09	......	4.66	......	3.85	......	1.22	......	2.00	......	2.07	......	2.33	......	4.61	......	1.59	......	4.36	......	36.52	......
Burnside	9.18	+5.43	2.93	-1.33	3.62	-1.59	6.27	+2.32	4.35	+0.28	3.47	-0.91	2.05	-2.88	2.57	-1.54	3.97	+0.71	5.68	+3.38	2.12	1.09	2.74	-1.31	48.95	+ 1.41
Carrollton	4.20	+0.56	1.40	-1.48	1.72	1.77	3.04	-0.14	3.54	0.50	3.41	+0.11	5.56	+2.16	4.41	+1.59	2.16	-0.67	2.46	-0.19	1.80	-1.13	3.61	+0.61	37.31	- 0.85
Cloverport	3.23	......	1.33	....	1.11	.....	3.25	.....	3.56	......	3.06	.....	8.25	......	3.31	......	2.57	......	3.38	......	2.12	......	4.27	......	39.44	......
Edmonton	4.82	+0.77	4.57	+0.16	2.20	-3.63	4.72	+0.62	....	.....	5.22	+0.95	6.45	-1.46	2.55	-0.84	1.26	-2.09	.....	......	2.03	-1.87	5.11	+0.84	.....	......
Eubank	6.25	+2.28	2.87	-1.22	2.68	-2.57	4.48	+0.43	4.42	+0.47	2.36	-1.72	3.37	1.26	1.26	-2.69	4.21	+0.69	4.94	+2.80	3.78	+0.75	4.25	+0.83	44.87	- 1.21
Frankfort	4.46	+0.84	3.13	-0.43	1.58	3.12	2.87	-0.86	3.03	-0.78	3.96	-0.24	4.12	+0.01	2.48	-1.20	1.80	-1.06	3.76	+1.81	2.05	1.36	4.60	+1.01	37.84	- 4.38
Franklin	.....	......	.....	......	.....	......	....	......	.....	......	.....	......	.....	......	.....	......	.....	......	3.70	+1.60	1.53	-2.00	4.41	+0.13	......	....
Greensburg	5.03	+0.52	1.77	-2.25	1.91	-3.12	3.73	-0.12	1.78	-2.51	2.02	-2.43	4.71	+0.12	2.28	1.62	2.80	-0.26	5.51	+2.75	1.62	-1.79	4.14	-0.02	37.30	-10.73
High Bridge	5.37	+1.13	1.67	-1.79	2.05	2.16	2.24	-1.45	3.55	-0.17	4.04	+0.05	4.32	0.20	2.39	-1.48	2.82	-0.06	3.83	+1.36	2.37	0.34	4.41	+0.01	39.06	- 5.20
Irvington	3.92	-0.53	1.79	-1.54	1.67	-2.93	3.50	-0.52	5.86	+2.45	4.16	+0.17	1.72	-1.83	3.06	-0.54	1.65	-1.34	2.91	+0.16	1.24	-1.97	3.90	0.00	35.38	- 8.42
Junction City	5.69	+1.27	2.63	-1.00	2.33	-2.78	2.99	-0.72	3.75	0.00	3.25	-0.57	5.47	+1.24	1.55	-1.58	2.72	-0.30	4.09	+2.10	2.69	-0.45	5.47	+1.24	42.63	- 1.55
Leitchfield	4.27	-0.25	1.32	-2.46	0.23	-4.56	4.29	+0.21	3.07	-0.93	2.20	-1.79	3.57	-0.57	4.02	-0.35	2.60	-1.04	4.28	+1.85	2.10	1.83	5.70	+1.08	37.65	9.94
Lexington	4.46	+0.63	1.92	-1.31	1.55	3.17	2.09	-1.25	4.13	+0.61	3.61	-0.38	2.01	-2.43	2.68	-0.89	1.41	-1.01	4.57	+2.35	2.24	-1.24	4.83	+1.51	35.50	- 6.58
Loretto	.	......	2.00	-1.05	1.90	-2.31	4.05	+0.39	6.50	+2.63	2.57	-1.91	1.57	-2.63	1.51	-2.15	....	.....	3.44	+1.00	...	......	....	.....	......	......
LOUISVILLE	3.49	-0.41	1.90	-1.85	1.22	-3.10	2.52	1.55	4.99	+1.35	4.24	+0.01	4.02	+0.28	3.25	0.26	2.19	0.44	2.62	-0.01	1.19	-2.99	4.48	+0.75	36.11	- 8.22
Do (Cherokee Park)	4.09	......	0.49	......	1.56	......	2.92	......	5.05	+1.17	4.50	+0.94	4.72	-0.90	4.55	+0.40	2.46	-0.71	2.66	-0.76	1.64	-0.79	4.95	+0.78	39.59	......
St. John	4.53	-0.04	2.66	-1.32	1.58	-3.41	3.60	-0.27	2.25	-1.73	2.67	-1.33	6.40	+2.85	3.58	-0.05	3.41	+0.29	3.45	+0.96	1.50	-1.98	5.50	+1.08	41.13	- 4.95
Scott	3.76	-0.33	1.81	-0.94	2.52	1.92	3.21	+0.03	4.26	+0.20	4.48	+0.80	2.50	-0.84	3.66	+0.12	2.35	-0.20	3.95	+1.61	1.71	-1.09	4.48	+1.27	38.69	1.29
Shelbyville	4.42	+0.45	2.17	-1.63	1.54	-3.17	2.75	-0.97	5.61	+1.49	3.94	-0.52	2.66	-1.44	3.80	+0.44	1.93	0.92	3.25	+0.83	1.73	-1.68	4.64	+0.75	38.44	- 6.37
Taylorsville	4.64	-0.05	2.61	-1.16	1.49	2.85	2.53	-1.94	3.59	+0.12	3.77	-0.76	2.98	-1.66	4.08	+0.36	1.35	2.10	3.90	+1.35	1.71	-1.39	5.31	+0.89	37.96	- 9.19
Williamstown	4.88	+1.01	2.10	-0.87	1.70	-2.46	2.90	-0.20	2.90	0.65	3.49	-0.24	2.60	-1.46	3.15	-0.99	2.97	--0.12	2.95	+0.07	2.24	-0.10	4.06	+0.46	35.94	5.55
Woodbury	4.08	.	2.14	......	1.75	.....	3.63	.....	2.43	......	2.34	.....	4.39	......	4.02	......	2.65	......	4.17	......	1.53	.....	3.20	......	36.33	......
EASTERN DIVISION.																										
Beattyville	5.20	+0.54	2.88	-1.22	2.54	-2.79	4.24	-0.03	5.43	+1.28	5.35	+0.64	5.99	+0.96	2.12	-2.51	2.75	-0.30	3.23	+0.07	1.32	1.43	3.20	-1.57	44.25	- 6.26
Berea	5.94	+1.41	2.35	-0.82	3.21	-1.72	3.59	-0.02	3.78	-0.20	2.88	-2.00	3.79	-1.12	....	......	.....	......	....	......	.....	......	....	......	.....	......
Catlettsburg	3.77	-0.25	2.65	-0.86	4.23	-0.23	3.87	+0.34	3.47	-0.71	3.18	-1.25	1.65	2.55	1.63	1.98	2.06	-0.54	3.43	+0.76	1.34	1.50	3.34	-0.16	34.62	- 8.93
Cynthiana	4.49	....	3.32	......	2.79	....	3.33	.....	5.70	....	3.09	......	3.69	......	4.90	......	2.55	......	3.35	......	2.15	......	2.90	......	42.26	......
Falmouth	3.95	+0.25	3.24	-0.12	2.25	-1.84	3.22	0.25	3.25	-0.42	5.45	+1.28	2.67	-1.24	3.33	-0.20	3.00	+0.54	2.77	+0.33	1.85	-1.32	4.00	+0.65	38.98	- 2.34
Farmers	4.22	+0.42	2.12	-1.05	3.18	-1.38	5.75	+1.25	2.51	-1.55	4.45	+0.46	3.16	-2.14	2.88	1.94	2.45	-0.64	3.64	+0.34	2.14	-0.59	4.66	+1.06	41.16	5.76
Harlan	...	......	....	......	.....	......	.....	......	....	......	.....	......	.....	......	.....	......	3.92	......	6.91	......	1.83	......	4.62	......	......	....
Jackson	4.90	......	2.62	......	1.77	-2.86	3.55	-0.03	4.94	....	4.71	......	3.49	......	1.30	......	3.77	......	4.20	......	1.31	-1.37	2.83	-0.77	39.39	....
London	8.19	......	2.52	.....	3.12	......	5.17	......	7.40	....	7.64	......	3.51	......	5.12	.....	7.13	......	4.54	......	2.15	......	3.92	.....	60.41	....
Louisa	4.00	+0.40	2.19	1.49	3.95	-0.17	2.90	-0.32	3.04	-1.18	4.70	-0.34	1.50	1.86	3.15	-0.50	2.01	-0.56	3.97	+1.09	1.00	-1.75	2.74	-0.42	35.15	- 7.10
Manchester	3.84	-0.15	2.00	-0.94	1.81	-2.69	3.48	+0.13	3.17	+0.27	4.76	.....	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	......	....
Maysville	4.67	+0.51	2.19	-1.14	2.51	-2.13	3.67	+0.24	4.59	+0.54	4.23	0.10	5.02	+0.48	3.27	0.71	2.38	0.25	3.01	+0.49	2.53	-0.31	3.58	0.18	41.65	- 2.56
Middlesboro	10.28	+5.60	2.43	-2.49	2.53	2.95	4.44	-0.35	.....	.....	.....	......	...	......	.....	......	.....	......	....	......	.....	......	.....	......	......	....
Mount Sterling	4.64	+0.26	2.39	-1.88	2.75	-2.66	4.11	+0.19	2.92	-1.37	2.44	-2.69	4.70	-0.31	2.62	-1.32	3.43	+0.54	3.42	+1.02	3.37	-0.08	5.16	+1.21	41.95	- 7.09
Pikeville	5.84	+1.80	2.20	-1.31	4.05	-0.16	5.10	+1.20	5.39	+2.63	7.16	+2.85	6.22	+2.47	2.72	-0.80	3.74	+0.90	.....	....	1.80	-1.07	3.16	-1.10	.....	......
Richmond	3.75	-0.32	1.47	-2.17	1.38	-3.01	4.02	+0.41	2.41	-1.17	3.08	-0.86	2.86	-1.01	3.63	+0.43	1.93	-0.71	4.03	+1.78	3.40	+0.71	4.96	+1.30	36.92	4.62
Weeksbury	6.10	......	2.18	...	0.57	......	......	......	2.60	.....	3.20	.....	....	.....	....	......	.....	......	6.46	.....	1.32	.....	.....	......	......	......
Williamsburg	7.31	+3.28	1.65	-1.84	2.88	-2.04	5.17	+0.77	5.73	+1.65	5.65	+1.10	2.50	-2.37	5.20	+0.68	3.25	-0.11	4.68	+2.13	1.60	-1.33	2.24	1.45	47.86	- 0.53

The departures from normal precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

T Precipitation is less than 0.01 inch rain or melted snow.

Monthly and Annual Mean Temperatures for the Year 1918, with Departures from the Normal

Stations	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
WESTERN DIVISION																										
Beaver Dam	19.8	-14.8	38.0	+2.8	52.0	5.3	53.0	-2.4	69.4	3.5	73.0	0.6	74.0	-3.6	80.6	1.4	63.0	-7.6	63.6	+6.2	47.4	+1.1	46.0	+10.4	[illegible]	[illegible]
Blandville	20.7	-12.7	40.4	+4.0	54.2	+7.1	55.0	-2.2	a69.6	+3.1	76.4	+1.5	77.0	-0.9	81.0	1.2	63.1	-7.9	62.1	+4.3	[illegible]	+0.7	45.6	[illegible]	[illegible]	[illegible]
Calhoun	20.1	-16.2	41.0	+3.7	54.0	+4.2	55.0	-3.9	70.0	+2.6	75.2	+0.2	75.0	-2.8	82.1	+4.6	63.4	8.8	[illegible]	[illegible]	46.8	-1.6	[illegible]	[illegible]	[illegible]	-0.5
Earlington	19.5	-16.1	38.6	+2.2	53.3	+5.8	54.2	-3.0	71.8	5.0	75.8	+0.2	74.0	3.9	82.7	6.1	65.5	-5.0	64.6	[illegible]	50.2	+2.3	[illegible]	[illegible]	[illegible]	[illegible]
Greenville	21.7		42.0		c55.1	......	57.4	......	71.2		a76.1		a76.0		82.6		64.6		[illegible]		a47.2		45.8	......	58.6	
Hopkinsville	22.8	-15.2	43.8	6.8	57.1	+7.9	55.2	-1.6	71.0	3.4	76.1	1.2	75.8	3.0	82.6	4.8	65.4	-6.5	64.6	4.2	47.4	0.6	46.0	+8.2	59.0	[illegible]
Marion	19.2	-16.8	40.6	4.9	54.4	+5.8	54.6	-2.7	70.6	+3.5	74.6	-0.3	76.0	-1.8	82.2	+4.1					47.7	-0.6	44.9	7.8		
Mayfield	19.0		c36.9		53.2		54.4	-2.8	a69.6	+3.4	75.8	+2.2	76.5	-1.1	81.2	3.9	64.6	-6.5	61.8	+3.3	45.8	-1.7	[illegible]			
Owensboro	18.1	-17.4	37.2	+2.5	51.8	+4.9	52.3	-2.9	70.5	+4.2	75.6	+1.5	74.8	-3.2	80.2	+3.8	61.7	-9.0	63.0	4.0	46.1	-1.4	46.4	[illegible]	[illegible]	[illegible]
Paducah	21.8	-15.6	42.4	6.4	56.4	+6.6	57.0	-2.2	71.8	+2.1	78.7	+0.8	79.4	-1.6	83.8	+3.1	64.6	-9.4	64.2	3.2	47.8	-1.1	46.4	+7.8	[illegible]	[illegible]
Princeton							a54.5	-3.7	71.5	+4.0	76.6		b76.7	..	82.0		62.6		62.9	+4.1	45.4	1.1	46.2	9.5		
Russellville	21.1		41.2		52.2		53.7		69.7		74.4		75.1		81.8	3.7	63.8	7.7								
CENTRAL DIVISION.																										
Alpha	24.0	-16.3	41.4	+2.9	53.8	+3.1	56.2	-1.1	68.0	+1.4	73.4	+0.3	72.4	-3.8	77.3	+1.2	62.8	-7.9	63.6	+4.1	47.8	-1.7	47.6	+7.2	57.4	-0.8
Anchorage	17.5	-16.1	37.7	+5.6	49.5	+4.4	53.0	-0.4	68.7	+4.3	72.4	+0.4	72.2	3.9	79.3	+4.7	61.0	-8.1	60.5	+4.0	43.3	-1.2	42.3	+8.4	54.8	0.2
Bardstown	21.5	-14.4	37.6	+3.1	49.4	+2.8	52.9	-2.4	69.3	+2.3	73.6	-1.0	74.0	4.5	81.0	+3.8	61.9	-10.0	63.3	+3.8	46.4	-0.6	44.7	+9.0	56.3	0.3
Bowling Green	22.0	-14.6	41.6	4.4	55.8	+7.5	55.4	-2.7	71.8	+4.2	76.7	+0.8	76.2	-2.8	81.9	+3.0	64.5	-7.2	64.7	+5.5	48.2	0.9	47.0	9.4	58.8	+0.7
Edmonton	23.8	-12.1	d43.8	+7.4	k53.6	+5.4	53.8	-2.0	..		g72.8	-0.3	f74.3	-1.4	m78.0	3.0	c62.4	-7.3	.		c48.0	+1.2	h44.0	+6.4		
Eubank	20.0	-14.9	39.4	+6.1	49.4	+3.1	52.8	-1.0	67.0	+2.8	71.9	+0.8	71.4	-3.3	77.8	+4.0	61.4	-7.3	60.2	+3.5	45.2	+0.7	43.2	7.5	55.0	0.2
Frankfort	21.4	-14.8	39.6	+4.8	51.5	+5.3	55.4	+0.3	69.6	+4.7	74.1	+0.8	73.6	-2.8	80.2	+5.5	62.6	-6.0	62.0	+5.5	45.5	0.7	44.6	+7.3	56.7	+0.9
Franklin																			c63.5	4.2	47.2	1.3	45.9	+5.9		
Greensburg	20.4	-13.8	38.2	+4.5	50.4	+3.6	52.8	-2.2	67.8	+2.9	72.2	-1.3	72.4	-4.0	78.4	+2.8	61.4	-8.6	61.3	+4.8	45.1	+0.4	44.6	+8.6	55.4	-0.2
Irvington	20.8	-15.4	39.6	+5.3	52.4	+5.6	54.4	-1.1	70.8	+4.5	74.0	0.3	74.1	3.3	81.0	+5.0	61.9	-8.5	62.8	7.2	46.0	-0.7	45.0	+9.0	56.9	+0.7
Junction City	21.8	-12.8	39.6	+6.5	51.8	+5.7	54.8	+0.3	68.5	+4.0	71.6	0.0	72.7	-2.3	79.0	+4.7	62.6	-7.0	61.8	+4.3	44.4	+1.8	45.0	+9.7	56.1	+1.2
Leitchfield	20.9	-14.2	39.0	+5.0	51.4	+5.4	54.0	-1.4	69.8	+4.3	73.6	+0.7	74.0	2.6	79.9	+4.5	61.6	-8.2	b62.0	+3.9	45.0	1.3	44.6	+8.8	56.3	+0.4
Lexington	19.8	-13.2	37.9	+2.3	49.2	+5.8	51.8	-1.9	69.4	+5.1	72.2	-1.0	72.6	-4.0	79.4	+4.8	62.4	-5.5	61.1	+4.6	44.4	-0.3	42.8	+6.4	55.2	0.2
Loretto	21.2	-15.2	40.2	+6.3	52.3	+5.1	55.0	+0.1	69.6	+4.0	73.6	+1.1	74.0	-2.3	81.4	+6.2	64.4	-5.8	f63.3	+5.0	..		...			
LOUISVILLE	19.6	-14.7	37.9	+1.3	50.8	+5.5	53.2	-3.0	71.2	+4.5	73.6	1.4	75.0	-3.6	81.4	4.9	62.7	7.2	61.7	3.3	46.2	-0.1	44.8	+6.7	56.5	0.3
Do (Cherokee Park)	19.2	....	38.2	..	50.2	...	53.8		68.8	3.1	71.6	1.4	71.7	-4.8	77.8	+2.5	60.4	-7.6	60.2	3.0	44.4	-2.2	42.8	7.9	54.9	
St. John	17.4	-16.7	35.9	+2.9	49.8	+4.7	52.2	-2.2	68.8	4.1	72.2	-0.1	72.9	-2.8	78.7	+4.0	60.8	-8.3	61.2	+3.6	45.5	+0.1	44.0	9.4	55.0	0.1
Scott	17.4	-15.7	35.7	+5.0	49.4	+6.0	51.8	-1.3	68.4	+4.6	71.2	0.4	72.3	-4.3	79.2	+4.1	60.6	-8.9	60.5	+2.7	44.6	-0.4	42.7	+9.5	54.5	+0.1
Shelbyville	16.6	-16.7	34.8	+0.8	48.2	+3.5	51.8	-2.9	68.0	+3.0	72.0	-1.5	72.6	-4.5	80.2	+4.7	61.5	7.7	61.4	+4.7	46.0	+1.6	43.0	+8.0	51.7	-0.6
Taylorsville	19.6	-15.5	38.8	+4.4	50.0	+4.2	53.2	-1.2	68.2	+3.7	72.4	+0.1	72.2	-4.1	78.9	4.5	60.2	-6.0	60.0	4.0	43.6	-1.3	43.4	+8.3	55.0	-0.1
Williamstown	17.8	-14.9	35.4	4.4	49.2	+6.0	51.4	-0.9	69.4	+6.3	71.9	1.3	73.0	-2.6	80.3	+6.5	63.0	-5.4	63.0	+6.0	46.3	+1.2	44.0	+11.1	55.4	+1.6
EASTERN DIVISION.																										
Beattyville	21.0	-13.0	38.8	+4.3	49.0	+4.3	54.2	+0.3	68.1	+4.0	71.2	-0.8	72.0	-3.4	79.6	4.7	64.5	-4.6	63.3	+6.2	45.6	1.5	44.4	+10.3	56.0	+1.2
Berea	23.2	-14.1	41.1	+5.3	51.8	+4.5	54.2	-1.4	69.4	+3.6	73.3	+0.8	71.1	5.3			c61.8	-7.5	...							
Farmers	20.2	-15.1	38.0	+2.4	49.4	+4.5	52.2	-2.2	67.2	+3.5	71.2	-0.2	71.2	-3.7	77.8	+4.0	62.1	-6.4	61.5	4.9	44.0	-1.0	44.2	+8.7	54.9	-0.1
Harlan	...	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64.7	.....	62.6	.	e48.7	....	e42.9	.		
Maysville	16.9	-16.2	34.8	+1.8	46.8	+2.7	53.0	-0.6	68.4	+3.3	71.8	-1.1	72.8	-4.2	79.2	+3.5	63.6	-6.0	62.3	5.2	45.1	+0.5	44.4	+10.6	54.9	-0.1
Middlesboro	26.7	-11.1	44.4	+5.5	54.3	+5.8	54.4	1.8	....																	
Mount Sterling	18.6	-15.2	36.0	+2.7	48.4	+4.7	51.6	-2.0	68.2	4.1	71.9	-0.5	72.0	-3.6	78.6	+4.7	61.6	-6.0	60.7	5.9	44.1	-0.2	43.0	+7.6	54.6	+0.2
Richmond	20.8	-12.9	39.3	+4.4	49.3	+4.0	53.1	-2.4	69.4	+3.9	73.1	-0.3	73.2	-3.7	80.4	+4.8	62.9	-7.7	63.2	+4.8	46.0	-0.8	45.0	7.7	56.3	+0.1
Weeksbury	27.4	....	44.3		53.0		56.0	.....	69.3	.....	72.0	.....							60.7	....	43.0	.				...
Williamsburg	24.7	-13.9	40.7	+3.2	52.2	+6.1	55.4	-0.3	68.6	+2.3	73.2	-0.3	72.3	-4.5	77.9	+1.8	64.2	-6.4	62.2	+2.7	48.8	+1.7	46.6	+8.3	57.2	0.0

All temperature data are taken from self registering thermometers.

The departures from normal temperature are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

MONTHLY SUMMARIES, 1918.

Month	Temperature				Precipitation.		Average number of days.			
	State average.	*Departure.	Highest.	Lowest.	State average.	*Departure.	With .01 or more rain	Clear.	Partly cloudy.	Cloudy.
January	20.6	-14.6	62	-20	5.09	+ 0.70	14	9	7	15
February	39.3	3.7	83	- 8	2.04	- 1.56	7	11	7	10
March	51.6	+ 5.6	85	17	1.97	2.69	8	15	7	9
April	53.9	2.0	87	25	4.07	- 0.13	12	8	8	14
May	69.4	+ 3.8	97	28	4.29	+ 0.34	8	16	8	7
June	73.6	- 0.1	104	37	3.63	+ 0.55	8	16	8	6
July	73.8	- 2.9	103	46	3.28	1.02	8	15	9	7
August	80.2	+ 4.5	111	50	3.18	0.38	7	17	9	5
September	62.8	- 7.2	92	30	2.94	0.18	8	15	6	9
October	62.3	+ 4.5	91	32	3.81	1.31	10	13	7	11
November	46.1	0.0	77	19	1.90	1.45	6	14	5	11
December	44.8	+ 7.7	75	14	4.44	+ 0.50	12	10	6	15
Annual means and extremes	56.5	+ 0.2	111	-20	40.64	- 4.49	108	159	87	119

*Compared with 30 years' normal.

LISTS OF COOPERATORS.

Cooperative Observers.

Stations.	Observers.	Stations.	Observers.	Stations.	Observers.	Stations.	Observers.
Alpha	W. W. Hicks.	Cynthiana	P. H. Kehoe.	Junction City	E. L. Grubbs.	Owensboro	Henry S. Berry.
Anchorage	C. E. Barret.	Earlington	Brick Southworth.	Irvington	W. J. Piggott.	Paducah (Lone Oak)	E. Futrell, Jr.
Bardstown	Chas. M. Talbott.	Edmonton	P. W. Ray.	Jackson	J. L. McCoy.	Pikeville	I. M. Williams.
Beattyville	Mrs. Sabina E. Hall	Eubank	Mrs. Katie Payne	Leitchfield	John E. Stone.	Princeton	Ray Baker.
Beaver Dam	Miss Addie B. Taylor	Falmouth	J. V. Oldham.	Lexington	U. S. Weather Bureau	Richmond	J. W. Crooke.
Berea	Chas. D. Lewis.	Farmers	Durwood Cassity.	Loretto	Loretto Academy.	Russellville	E. C. Shelton.
Blandville	E. W. Horr.	Frankfort	Mrs. Amelia Wood	Louisa	Carrie S. Adams.	St. John	Bethlehem Academy
Bowling Green	Mrs. L. G. Causey.	Franklin	V. V. Atkinson.	Louisville	U. S. Weather Bureau	Scott	E. B. Wilson.
Brownsville	Jas. H. Young.	Greensburg	Mrs. B. K. H. Alcorn	Manchester	Mrs. Geo. P. Hatton	Shelbyville	Mrs. L. A. Burnett
Burnside	C. L. Hurt	Greenville	C. R. Lovell.	Marion	B. C. Paris.	Taylorsville	E. D. Bourne.
Calhoun	W. A. Taylor.			Mayfield	J. N. Davis.	Weeksbury	
Catlettsburg	Forester Farley.	Henderson	W. W. Shelby.	Maysville	John C. Armstrong.	Williamsburg	N. C. Jones.
Cherokee Park	Wm. I. Hunt.	High Bridge	Miss Lulu Wood.	Middlesboro	B. H. Perkins.	Williamstown	Miss Rose Carter
Cloverport	W. A. Cockerill.	Hopkinsville	W. E. Graves.	Mount Sterling	W. R. McKee.	Woodbury	Virgil M. Whalin.

Daily Forecast Display and Distributing Stations.

Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen
Ashland	Park City Tel. Co	Earlington	Brick Southworth.	Lebanon	Cumb. Tel. Co.	Olive Hill.	B. S. Tel. Co.
Bardstown	Mgr. Cum. Tel. Office	Eddyville	Mgr. Cum. Tel. Office	Leavenworth .. Ind.	Mgr. Cum. Tel. Office	Owensboro	Mgr. Cum. Tel. Office
Beaver Dam	Mgr. Cum. Tel. Office	Elizabethtown	Mgr. Cum. Tel. Office	Leitchfield	Mgr. Cumb. Tel. Co.	Paducah	East Tenn. Tel. Co.
Bedford	Mgr. Cum. Tel. Office	Fairfield	Peoples Tel. Co.	Lexington	U. S. Weather Bureau	Pikeville	E'n Ky. Home Tel. Co
Benton	Mgr. Cum. Tel. Office	Frankfort	Mrs. Amelia Wo	Louisa	Sou. Bell Tel. &T. Co	Prestonburg	Sou. Bell Tel. Co.
Bowling Green	A. M. Causey.	Franklin	Farmers Mut'l Tel Co.	Louisville	U. S. Weather Bureau	Princeton	Mgr. Cumb. Tel. Co.
Brandenburg	Mgr. Cum. Tel. Office	Fulton	Fulton Leader.	Madisonville	Mgr. Cumb. Tel. Co.	Richmond	J. W. Crooke.
Brumfield	Postmaster.	Hazard	Mgr. Cum. Tel. Office	Madison .... Ind.	Chas. G. Dickerson	Shelbyville	Mgr. Cumb. Tel. Co.
Burnside	A. B. Massey.	Henderson	Mgr. Postal Tel Office	Maysville	Mrs. Mary D. Marsh	Taylorsville	Cumb. Tel. Co.
Cadiz	Mgr. Cum. Tel. Office	Hickman	Sexton & Speer	Middlesboro	B. H. Perkins.	Union	Cons. Telephone Co.
Catlettsburg	Mrs. M. M. Bruns.	Hodgenville	Mgr. Cum. Tel. Office	Morganfield	Mgr. Cumb. Tel. Co.	Versailles	Postmaster
Cave City	Geo. T. Tucker.	Hopkinsville	Christian-Todd T. Co	Mount Sterling	Cumb. Tel. Co.	Whitesberg	Mgr. Cumb. Tel. Co.
Cloverport	Wm. A. Cockerill	Irvington	Mgr. Cum. Tel. Office.	Mt. Vernon	Cumb. Tel. Co.	Wickliffe	Mgr. Cumb. Tel. Co.
Corydon .... Ind.	Mgr. Cum. Tel. Office	Jackson	Mgr. Cum. Tel. Office	New Haven	Mgr. Cumb. Tel. Co.	Williamsburg	Mgr. Cumb. Tel. Co.
Danville	Mgr. Cum. Tel. Co.	Lawrenceburg	Mgr. Cum. Tel. Office				

NOTE—Tables and charts giving climatic data for Kentucky in detail during 1918 have been published for each month at the Kentucky section center, Weather Bureau Office, Louisville, Ky., and can be obtained from the Official in Charge at that office. Indexes to special articles published during past years in Kentucky climatological reports will be found in the Monthly Report for June, 1909,

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

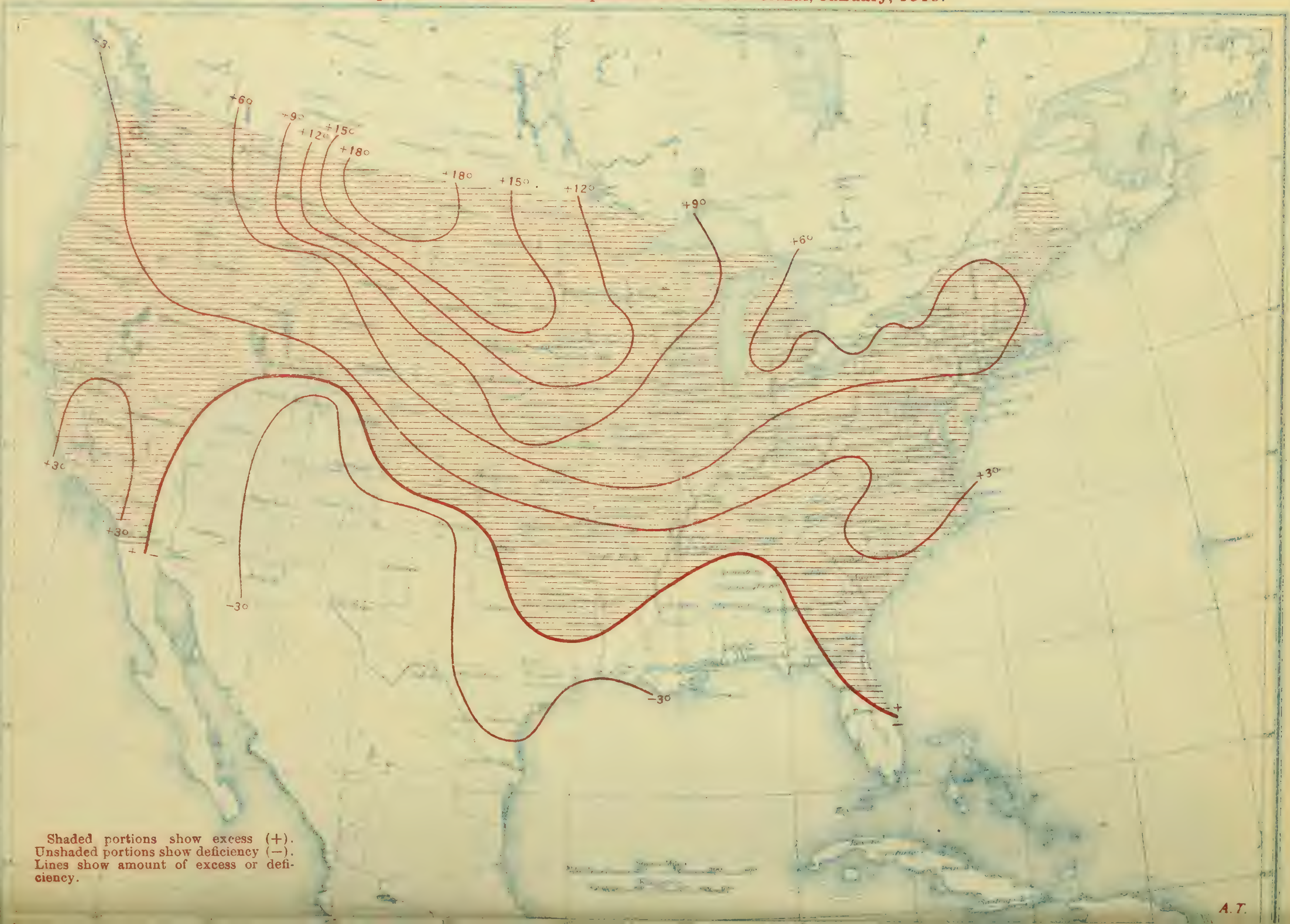
KENTUCKY SECTION

JANUARY, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
FEBRUARY 26, 1919

Departure of the Mean Temperature from the Normal, January, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., JANUARY, 1919. No. 1

GENERAL SUMMARY.

Except for the sharp cold spell during the first decade, the month was decidedly warm for January, with temperatures remarkably uniform and falling but little below the freezing point. Weather conditions were generally favorable for winter grains, although there was very little snowfall and practically no snow covering. Growth of winter grains was thoroughly checked by the cold weather early in the month, so that the light freezes during the last two decades were sufficient to keep the plants practically dormant. The freezing weather seems to have caused no injury of consequence, on account of the vigorous condition of the plants and the absence of excess moisture in the soil.

Precipitation averaged considerably below normal, being unusually light over the northern counties and quite heavy toward the southern border and in the mountains. About half of the monthly amount occurred on the 1st—a continuation of the rains of December 31st—but the remainder fell generally in light to moderate showers. Fine days, suitable for outdoor work, were unusually frequent; and weather conditions from the standpoint of farming operations have rarely been so favorable in this section in January. The soil drained out so well that it could be readily worked in most of the principal farming districts, and considerable plowing and some seeding, which are usually done in February and March, were accomplished toward the end of the month.

PRESSURE.

The most important low pressure formation of the month was the deep trough which moved across the central valleys and Lake region during the period December 30, 1918—January 1, 1919, attended by heavy rains and closely followed by a cold wave. The cold spell lasted from the 2d to the 6th, and proved to be the only wintry weather of the month. Other low pressure formations—mostly shallow, but extensive troughs—moved eastward over the central valleys or the Lake region during the 6 (p. m.)-7th, 13-14th, 17-18th, 20th-23d, and the 25th. High pressure formations dominated during the 2d-5th, 8-12th, 14 (p. m.)-16th, 19th, 24th, and 26th-31st.

The mean sea-level pressure, based on the reports of two stations, was 30.16 inches. The extremes were 30.48 inches on the 12th at Lexington, and 29.68 inches on the 1st at Louisville.

TEMPERATURE.

The average temperature for the State, 36 stations reporting, was 37.9°, which is 2.7° above normal. Practically all the cold weather occurred in the first decade, the coldest day being the 4th when minimum temperatures registered from −1° to 7° over the State. Temperatures during the 4-day period 2d-5th averaged 15° to 25° below normal; but during the last two decades they averaged from 5° to 20° above normal, maxima frequently rising above 60°. The extremes for the month were −1° at Marion on the 4th, and 68° at Calhoun and Earlington on the 19th and at Bardstown on the 22d.

PRECIPITATION.

Precipitation for the State, based on the reports of 51 stations, averaged 3.62 inches, which is 0.77 inch below normal. Rainfalls of 2 to 4 inches occurred at many stations on the 1st. Light showers were general in the period 14-17th and moderate rains on the 23d. Over the northern half of the State monthly amounts were generally less than 3 inches, and at several stations along the Ohio River they were less than 2 inches. Over the southern and southeastern counties they ranged from 4 to 7 inches. Amounts at the various stations ranged between 1.63 inches at Louisville and 7.10 inches at Alpha and Burnside.

WIND.

The total wind movement at Louisville was 7,783 miles, and at Lexington 9,571 miles, with average hourly velocities of 10.5 and 12.9 miles, respectively. The maximum velocity for five minutes was at the rate of 30 miles per hour from the west on the 28th at Louisville, and 35 miles from the south on the 1st at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 76 per cent, at 12 noon 63 per cent, and at 7 p. m. 63 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 64 and at Lexington 53. This percentage is the highest on record for January at Louisville.

MISCELLANEOUS.

Rivers.—There were floods in headwater streams in the southern counties on the 1st, due to the heavy rains of December 31st-January 1st. Little River flooded some dwellings at Hopkinsville. These rains caused a sharp rise in the Ohio, flood stages being reached at Catlettsburg and Portsmouth on the 4th, at Maysville, Cincinnati, and Evansville on the 5th, and at Cloverport on the 6th. Flood stages were nearly reached at Madison and Louisville. Stages slightly above flood were reached in the Kentucky River at Jackson, High Bridge, and Frankfort on the 2d. Similar tides occurred in the Cumberland, Green, Licking and Big Sandy; but in most cases the waters only just reached the danger line and then quickly subsided, causing no damage of consequence.

COMPARATIVE DATA FOR JANUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	38.0	+2.8	65	13	3.52	−0.87	
1890	44.0	+8.8	77	10	6.43	+2.04	
1891	37.0	+1.8	68	14	5.40	+1.01	
1892	29.0	−6.2	65	− 6	2.72	−1.67	
1893	26.0	−9.2	67	−22	2.08	−2.31	
1894	38.0	+2.8	78	−12	2.91	−1.48	
1895	30.0	−5.2	78	−16	5.71	+1.32	11
1896	36.1	+0.9	74	− 3	1.25	−3.14	6
1897	32.0	−3.2	75	−16	3.25	−1.14	8
1898	40.4	+5.2	72	6	8.76	+4.37	12
1899	34.4	−0.8	68	−18	6.23	+1.84	11
1900	37.2	+2.0	77	8	2.80	−1.59	8
1901	36.7	+1.5	75	4	1.85	−2.54	7
1902	33.7	−1.5	70	5	5.14	+0.75	7
1903	34.8	−0.4	82	− 9	2.50	−1.89	9
1904	32.3	−2.9	70	− 9	3.17	−1.22	10
1905	27.5	−7.7	70	15	2.83	−1.56	11
1906	39.7	+4.5	80	9	3.48	−0.91	8
1907	43.2	+8.0	83	−11	8.02	+3.63	14
1908	35.0	−0.2	62	7	2.20	−2.19	8
1909	38.3	+3.1	77	− 8	3.47	−0.92	9
1910	33.8	−1.4	70	−20	4.41	+0.02	10
1911	39.7	+4.5	73	−16	2.88	−1.51	11
1912	25.9	−9.3	61	−20	3.09	−1.30	8
1913	42.5	+7.3	76	13	11.41	+7.02	14
1914	39.4	+4.2	79	5	2.31	−2.08	6
1915	33.0	−2.2	65	0	5.03	+0.64	13
1916	41.2	+6.0	78	− 5	7.27	+2.88	14
1917	36.7	+1.5	74	−17	6.38	+1.99	12
1918	20.6	−14.6	62	−20	5.09	+0.70	14
1919	37.9	+2.7	68	− 1	3.62	−0.77	7

Climatological data for January, 1919.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division																				
Beaver Dam	Ohio	441	15	39.8	+ 5.2	67	20	5	4	38	2.83	−1.63	1.80		5	18	8	5	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	39.0	+ 5.6	63	20	1	4	26	1.68	−2.95	0.61	0.3	8	11	9	11	sw.	E. W. Horr.
Calhoun	McLean	437	14	39.0	+ 2.7	68	19	5	4	34	2.40	−2.69	1.40	0.3	7	10	11	10	sw.	W. A. Taylor.
Earlington	Hopkins	420	27	39.7	1.1	68	19†	7	4	39	2.39	−1.74	1.45	T.	8	18	0	13	se.	Brick Southworth
Greenville	Muhlenburg	519	1	39.4		65	19†	4	4	38	2.80		2.00		5	20	6	5	s.	C. R. Lovell.
Henderson	Henderson	327	9								1.98	1.75	0.70	T.	5					W. W. Shelby.
Hopkinsville	Christian	524	21	39.0	+ 1.0	66	21	3	4	37	4.22	−0.91	3.00	0.2	9	9	11	11	s.	W. E. Graves.
Marion	Crittenden	571	19	38.8	+ 2.8	64	30	1	4	39	2.07	−2.73	1.31	T.	3	17	8	6	e.	B. C. Paris.
Mayfield	Graves	364	8	38.0	+ 2.4	62	19†	3	4	30	4.13		2.05	T.	6	11	11	9	s.	J. N. Davis.
Owensboro	Daviess	479	21	37.5	+ 2.0	63	20	6	4	28	1.70	−2.81	0.84	T.	6	13	7	11	se.	Henry S. Berry.
Paducah	McCracken	341	18	39.4	+ 2.4	66	20	3	4	30	2.84	−1.93	1.46	T.	7	17	1	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	37.0	+ 1.6	64b	20†	4b	4	34	4.15	0.00	2.55	T.	4	19	0	12	s.	Ray Baker.
Russellville	Logan	590	6																	E. C. Shelton.
Central Division																				
Alpha	Clinton	811	24	41.0	+ 0.7	64	21	7	4	36	7.10	+2.25	3.50	5.0	5	20	1	10	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	35.4	1.8	65	22	3	4	39	2.28	−1.38	1.11	0.8	4	17	10	4	se.	C. E. Barret.
Bardstown	Nelson	637	21	37.8	+ 1.9	68	22	1	4	38	3.56	−1.27	2.50		5	23	1	7	sw.	Chas. M. Talbott.
Bowling Green	Warren	500	27	40.2	+ 3.6	66	20	6	4	34	3.18	−1.46	1.75	T.	6	18	11	2	w.	Mrs. Lillie G. Causey
Brownsville	Edmonson	410	0								4.30		2.00	0.3	10					James H. Young.
Burnside	Pulaski	773	25								7.10	+2.55	2.20	2.0	10					C. L. Hurt.
Carrollton	Carroll	492	18								2.21	−1.43	0.78		6					Charlie Oliver.
Cloverport	Breckenridge	375	4								2.56		1.10	0.1	8					W. A. Cockerill.
Edmonton	Metcalfe	600	24																	P. W. Ray.
Eubank	Pulaski	1177	23	37.8	+ 2.9	64	21	2	4	34	5.84	+1.87	2.25	2.0	8	13	6	12	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	37.2	+ 1.0	64	22	6	4	30	2.92	+0.70	1.06	T.	7	17	4	10	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	41.1	+ 3.5	66	21†	7	4	33	4.32	+0.72	2.68	T.	7	15	5	11	s.	V. P. Atkinson.
Greensburg	Green	581	25	37.6	+ 3.4	66	19	1	4	37	5.99	+1.48	4.00	T.	7	3	8	20	s.	Mrs. Bettie K. H. Alcorn
High Bridge	Jessamine	762	15								5.35	+1.13	2.60		8					Miss Lulu Wood.
Irvington	Breckenridge	646	20	38.4	+ 2.2	63	22	6	4	26	2.17	−2.28	1.12	0.2	5	16	3	12	s.	W. J. Piggott.
Lebanon	Marion	681	19																	
Junction City	Boyle	985	24	38.2	+ 3.6	65	23	5	4	38	4.93	+0.51	3.20	1.9	8	12	9	10	s.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	36.8	+ 1.7	62	19†	4	4	31	2.13	−2.39	1.27	1.0	5	15	9	7	sw.	John E. Stone.
Lexington	Fayette	989	30	36.9	+ 3.9	63	22	3	3	32	2.48	−1.35	1.25	1.7	7	13	8	10	sw.	U. S. Weather Bureau.
Louisville	Jefferson	525	45	38.5	+ 4.2	63	22	6	3	34	1.63	−2.27	0.87	1.0	6	15	6	10	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do	531	8	35.6	+ 1.0	64	22	4	4	29	2.12	−2.66	0.94	1.0	5	17	5	9	s.	Wm. I. Hunt.
St. John	Hardin	777	21	36.4	+ 2.3	62	22†	6	4	34	3.42	−1.15	2.36	2.0	6	22	2	7		Sisters of Loretto.
Scott¶	Kenton	900	20	36.4	+ 3.3	62	22	2	4	29	2.29	−1.80	1.34	0.9	5	11	14	6	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	36.4	+ 3.1	65	22	3	4	37	3.02	−1.24	1.86	T.	6	18	3	10	s.	Mrs. Laura A. Burnett
Taylorsville	Spencer	489	15	35.6	+ 0.5	63	22	6	4	32	2.86	−1.83	1.83	0.6	6	18	3	10	s.	E. D. Bourne.
Williamstown	Grant	943	15	38.7	+ 6.0	65	22	3	4	32	2.35	−1.52	1.51	1.5	6	10	17	4		Miss Rose Carter
Woodbury	Butler	533	0								6.20		3.10	T.	8					Virgil M. Whalin.
Eastern Division																				
Beattyville	Lee	650	14	36.8	+ 2.8	65	20†	1	5	40	4.87	+0.21	1.86	3.0	10	8	10	13	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16																	H. E. Way.
Catlettsburg‡	Boyd	534	29								3.94	0.08	1.65	3.0	7					Forester Farley.
Cynthiana	Harrison	684	0								2.95		1.05		5					P. H. Kehoe.
Falmouth	Pendleton	600	29								2.79	0.91	0.97		5	14	7	10	e.	J. V. Oldham.
Farmers	Rowan	668	10	36.8	+ 1.5	65	22	4	4	43	4.84	+1.04	1.90		5	16	7	8	w.	Durwood Cassity.
Harlan	Harlan	1197	0																	Will Ward Duffield.
Jackson	Breathitt	776	6								5.31	+1.55	2.00	5.0	6					Jas. L. McCoy.
London	Laurel	1190	3								5.50		2.25	4.0	6					C. R. Lee.
Louisa	Lawrence	584	14								4.08	+0.48	1.61	4.5	6					Miss Carrie S. Adams.
Maysville	Mason	524	20	35.6	+ 2.5	59	22†	6	1	27	2.57	−1.59	1.17		6	21	5	5	s.	J. C. Armstrong.
Middlesboro	Bell	1128	21																	B. H. Perkins.
Mount Sterling	Montgomery	930	28	35.8	+ 2.2	64	20†	1	4b	32	3.94	+0.78	2.53	2.0	8	21	4	6	w.	W. R. McKee.
Pikeville	Pike	634	12								5.12	+1.08	1.48	6.0	9					I. M. Williams.
Richmond	Madison	926	24	39.0	5.3	67	22	1	4	34	3.45	0.62	2.10	1.1	8	18	2	11		J. W. Crooke.
Weeksbury	Floyd	1216	1					0	5		4.50		2.09	9.0	10	17	6	8		O. A. Lund.
Williamsburg	Whitley	939	20	38.2	0.4	65	19†	3	4	40	5.23	+1.20	1.60	7.0	8	17	4	10	w.	N. C. Jones.
State averages and extremes				37.9		68	19†	1	4	43	3.62		4.00	1.6	7	16	6	9	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡ Post office address Normal, Ky. ‡‡ Nerinx, Ky. ¶ Covington, Ky.

Daily Precipitation for January, 1919.

Stations		Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G.	1.80	...					T							.20	...	...	.06															[illegible]
Blandville	M.	.61	...		.03	T		.16							.15	...	.06	.01						.39	...								[illegible]
Calhoun	G.	1.40	T.	.02	.01	T		.11	....	....	....		....		.12		...	.04						.70	...								[illegible]
Earlington	G.	1.45	...	T.	....	.01	...	.11	....	....	....				.16		.03	.07															[illegible]
Greenville	G.	2.00					.30								.05		...	.05						.40	...								[illegible]
Henderson	O.	.70	.35			T	T.								.03									.70	...								[illegible]
Hopkinsville	C.	3.00	...	.01		.01		.14	.08						.22		.03	.06						.67	...								[illegible]
Marion	O.	1.31		T				.12																.64	...								2.07
Mayfield	M.	2.65	.60	....		T.	..								.20									.60	...								[illegible]
Owensboro	O.	.84	T	T	T	T.	..	.10	.02						.06		T							.63	...								1.70
Paducah	O.	1.40	....	T.		.02	..	.36					....		.18		.02							.74	...								2.84
Princeton	G.	2.55	....	T.					.70															.65	...								[illegible]
Russellville	G.																																
Central Division.																																	
Alpha	C.	3.50	.10	.10		T		T						...	T.			[illegible]						[illegible]									7.10
Anchorage	O.	1.11	....	T	T			.17						....	T			.14						.86	....	....							[illegible]
Bardstown	S.	2.50	....		....				.30						.20			.07						.49	....	....							[illegible]
Bowling Green	G.	1.75	.05		T.				.15	....	...					.18			.25					.80	....	....							3.18
Brownsville ‡	G.	2.00	.98		.02		.01	...	.27							.17	...	.12	.10					[illegible]	[illegible]							....	4.30
Burnside‖	C.	1.85	2.20	.15		.05			.20							.60		.15	.80					.60	.50	....							[illegible]
Carrollton	O.	.62	.78		T				.15									.63						.48	.15	....							2.21
Cloverport ‖	O.	1.10	.60	T.	T.		T.	....	.10						.01	.07		[illegible]						.58	.05	....						....	2.56
Edmonton	G.																																
Eubank	C.	2.25	2.15	.14					.14								.05	.20						.56	.35								[illegible]
Frankfort‖	K.	1.04	1.06		T				.22						T	.05	....	.02	....					.39	.14	....							2.92
Franklin	G.	2.68	T.	T	T	T		.08	.22						.16			.42	.06					.70	....	....							[illegible]
Greensburg	G.	4.00	.70	T				.04	.23							.12	..	.12	....					.78	....	....							[illegible]
High Bridge	K.	2.60	1.45						.37							.22	...	.01	.02					.42	.26	....							[illegible]
Irvington	O.	1.12	....	T.		T		T	.19						.06			.10	....					.70	....	....							2.17
Junction City	K.	3.20	.12	.05	.02	T		T	.30	T.	....	T			.24			.15						.85									[illegible]
Lebanon	S.																																
Leitchfield	G.	1.27						.30							.08	....								.48	....								2.13
Lexington ***	K.	1.37		.01	...	T.		.27							.10	....	T.	.01					[illegible]	.70	....								2.48
LOUISVILLE***	O.	.11		T.	T.	T.		.24							.05	....	.03	....					.04	.83	....								1.63
Do. (Cherokee Park)	O.	.94				T.		T.	.17						.07	....		.07						.87	....								2.12
St. John	S.	2.36				T		.15	.11						.12	..		.08						.60									3.42
Scott	L.	1.34					T.	T	.09						.03			.06	....					[illegible]									[illegible]
Shelbyville	S.	1.86		T.	...	T.		.06	.08						.07	..		.05	.....					[illegible]									[illegible]
Taylorsville	S.	1.83	T.	T	T	T.		.12	.08						.09	..		.05	.....					.69	.....								2.86
Williamstown	L.	1.51	...					.05	.09						.01			.01	.....					.68									2.35
Woodbury	G.	3.10	1.31	T	T.	T.	T.		.31							.31		.07	.04					[illegible]	[illegible]								[illegible]
Eastern Division.																																	
Beattyville ‖	K.	1.48	1.86	.18	.01		T	..	.02							.02		.03	.38					.17	.12								[illegible]
Berea	K.																																
Catlettsburg	B.	1.42	1.65	.13	..											.05		.03	......					.21	.45								3.94
Cynthiana	L.	1.05	.85	T.					.30						T.									.40	.35								[illegible]
Falmouth‖	L.	.76	.97		....				.20															.68	.18								2.79
Farmers	L.	1.90	1.80	....					.10							.25	...							*	.79								[illegible]
Harlan	K.	1.90																							.30								[illegible]
Jackson	K.	1.48	2.00													.10	....	T.	.90	....				.20	.63								5.31
London	C.	2.25	2.05	.36												.10		.20	...					.60									5.50
Louisa	B.	1.39	1.61	.23	...										T	.26								.24	.35								[illegible]
Maysville‖	O.	.81	1.17	T					.15							.10	...	T.						.27	.07								[illegible]
Middlesboro	C.																																
Mount Sterling	L.	2.53	.08	.10	...			.18	.05						.17			.03						.80									[illegible]
Pikeville	B.	1.26	1.48	.52	.08		.06	T										.26	.62					.32	.52								5.12
Richmond	K.	2.10	.30	.05	.03				.16							.23	.05						.53										3.45
Weeksbury	B.	2.00	.24	.30	...	.07	...		.10						.01	.16	...	.21	.49	....				.92									[illegible]
Williamsburg‖	C.	1.38	1.60	.58	T	T.	T.									.05		.23	.50					.36	.53								5.23

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24-hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

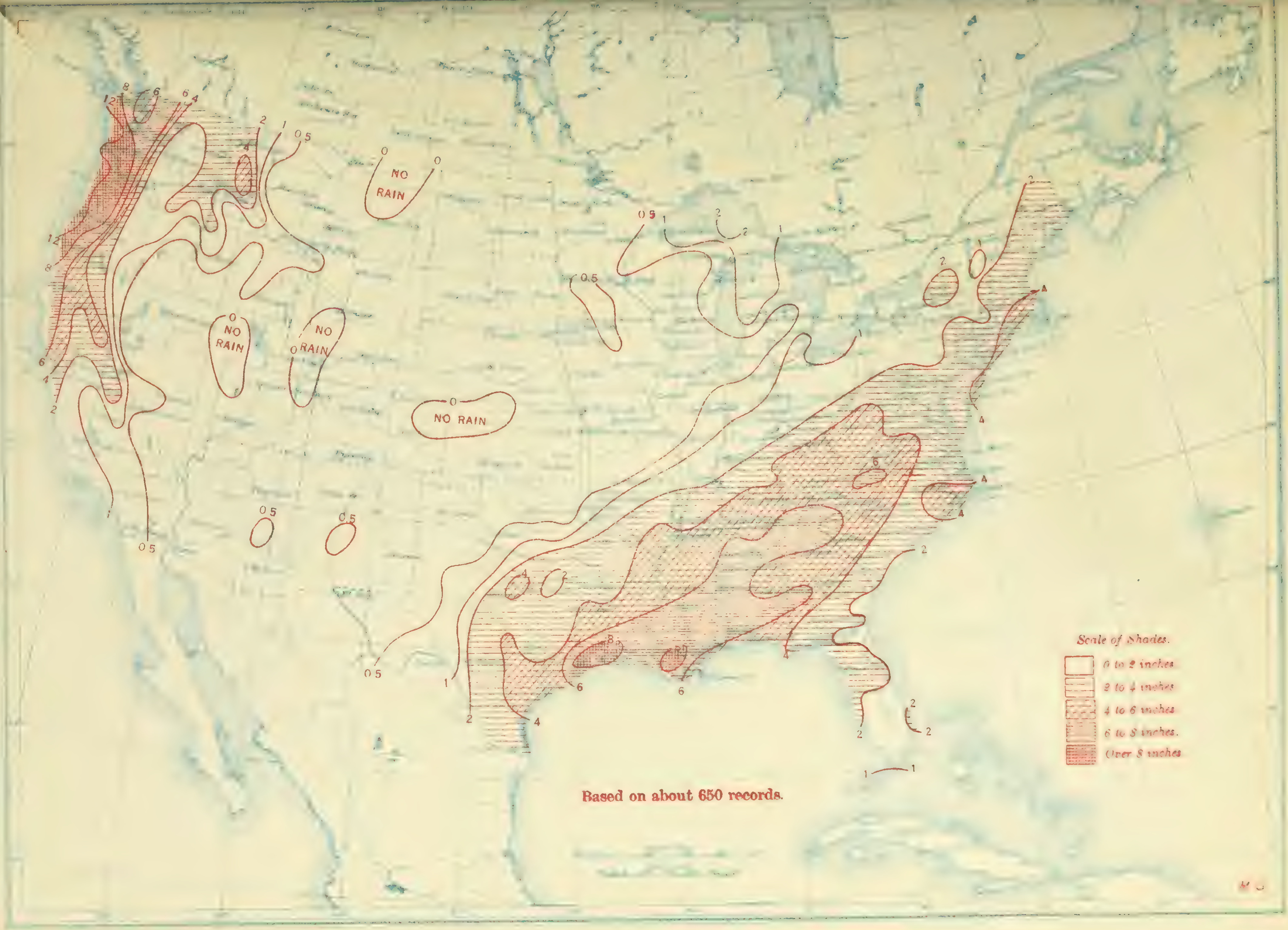
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green, (C) Cumberland, (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for January, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	59	31	21	22	29	40	42	36	38	45	55	54	59	58	48	47	50	60	65	67	65	65	65	50	52	56	60	55	62	65	63	51.1
	Minimum	29	19	9	5	18	26	29	25	24	18	30	33	37	39	25	24	40	40	29	31	37	42	38	29	30	28	22	33	30	32	33	28.5
Blandville	Maximum	41	27	18	21	27	41	38	35	39	43	52	56	54	50	45	45	47	59	61	63	61	59	52	55	53	54	51	54	57	60	62	47.7
	Minimum	27	15	5	1	19	20	31	24	28	20	29	35	39	35	25	30	37	33	38	39	42	48	38	32	37	33	31	35	35	39	39	30.3
Calhoun	Maximum	58	28	18	28	37	39	38	34	36	43	52	57	56	53	47	47	50	59	68	64	62	64	60	50	51	56	59	54	55	62	62	49.9
	Minimum	28	17	6	5	16	25	28	24	26	20	26	29	36	35	23	26	37	29	34	33	41	44	37	29	32	30	25	35	30	36	28	28.1
Earlington	Maximum	60	28	18	21	28	42	40	36	39	47	57	60	62	53	48	48	49	61	68	68	67	66	55	55	53	58	62	53	60	66	65	51.4
	Minimum	27	18	9	7	17	25	32	27	27	17	26	26	38	32	22	25	39	28	38	30	43	44	38	29	31	27	23	32	28	36	28	28.0
Greenville	Maximum	60	33	24	21	29	40	40	41	38	45	55	57	59	55	50	49	50	61	65	65	65	65	64	55	54	55	54	56	56	65	65	51.3
	Minimum	29	14	8	4	18	24	29	26	24	12	25	25	39	37	21	24	37	27	32	29	41	50	39	29	30	32	23	32	29	35	27	27.5
Hopkinsville	Maximum	59	32	21	23	29	42	40	38	41	42	52	57	60	50	47	45	47	61	65	62	66	63	61	53	52	59	60	55	58	63	64	50.5
	Minimum	29	19	10	3	18	23	28	27	23	17	23	27	34	37	22	25	38	28	29	30	36	42	37	29	43	29	23	33	30	29	30	27.5
Marion	Maximum	51	26	12	18	25	41	36	50	35	42	51	57	55	52	46	43	46	58	61	62	61	60	59	52	55	59	52	57	62	64	63	48.7
	Minimum	26	11	4	−1	17	24	30	24	27	20	28	36	42	32	25	32	37	30	36	42	42	47	37	30	32	33	33	33	35	25	26	28.9
Mayfield §§	Maximum	39	21	17	25	28	39	38	34	39	42	52	57	55	41	44	44	47	57	62	62	61	62	47	55	52	55	57	55	56	60	63	47.3
	Minimum	34	17	5	3	10	21	24	26	26	22	25	29	37	37	25	29	33	31	35	39	40	41	44	31	32	32	27	27	34	37	34	28.6
Owensboro	Maximum	57	28	18	19	28	37	37	37	30	43	50	53	58	46	48	48	50	55	60	63	61	62	58	49	51	53	53	49	51	56	58	47.3
	Minimum	28	18	7	6	16	25	28	23	25	20	26	28	32	35	25	24	27	29	33	35	40	45	37	30	32	31	26	34	31	33	31	27.7
Paducah (Lone Oak)	Maximum	60	30	21	20	30	40	37	36	37	44	53	56	54	54	46	45	46	59	62	66	65	61	59	55	53	53	54	52	56	59	60	49.1
	Minimum	30	12	6	3	18	22	32	23	27	22	29	32	39	35	26	29	37	33	37	36	38	37	39	30	36	32	30	35	35	39	40	29.6
Princeton §§	Maximum	34	20	13	22	28	41	37	33	31	44	51	57	59	40	40	45	48	60	62	64	63	..	64	53	52	44	56	52	56	..	61	[1]45.9
	Minimum	34	20	12	4	13	22	25	27	27	20	22	31	40	40	22	21	39	26	45	32	42	40	..	27	33	36	28	30	30	28	..	[1]28.1
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	60	40	25	24	25	32	44	42	36	42	56	61	59	49	48	52	46	57	62	63	64	63	51	53	57	55	60	52	54	61	63	50.2
	Minimum	40	25	9	7	14	25	34	36	28	21	34	25	41	44	31	24	40	40	40	33	57	38	40	35	35	34	25	40	37	44	32	31.9
Anchorage	Maximum	54	27	18	18	25	36	41	33	36	41	48	55	55	46	44	48	50	56	63	63	63	65	55	51	50	55	58	47	47	58	59	47.3
	Minimum	27	17	5	3	10	22	25	17	17	10	21	25	28	32	23	21	36	24	28	24	31	38	35	32	28	24	21	25	26	27	22	23.4
Bardstown	Maximum	57	35	25	18	27	36	42	38	39	48	52	62	64	47	50	50	49	57	65	66	67	68	57	58	57	55	60	51	50	62	58	50.6
	Minimum	32	21	9	1	15	12	15	12	23	22	24	26	26	41	24	22	38	28	31	30	36	37	33	35	32	30	21	28	25	28	22	25.1
Bowling Green	Maximum	60	43	33	26	29	38	39	40	38	45	53	57	58	53	49	51	56	59	64	66	65	63	57	50	53	58	61	60	60	63	63	51.9
	Minimum	34	21	10	6	12	26	27	27	26	20	27	26	34	29	27	26	30	32	34	33	37	39	40	32	34	33	27	35	37	32	30	28.5
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	58	50	24	24	22	33	45	42	35	41	53	56	57	52	45	52	49	45	60	63	64	61	57	51	52	53	58	52	50	59	59	49.1
	Minimum	47	20	10	2	5	20	20	22	23	14	25	24	30	30	29	22	39	35	33	29	37	33	40	32	32	31	22	31	28	28	26	26.4
Frankfort	Maximum	57	36	23	17	26	35	43	35	34	40	45	52	54	52	44	51	48	54	59	59	60	64	59	47	52	51	54	49	45	56	55	47.0
	Minimum	35	22	11	6	14	24	28	28	24	16	23	26	27	41	30	22	39	32	29	30	30	35	39	35	37	31	24	31	27	27	26	27.4
Franklin	Maximum	61	35	22	21	28	37	40	39	39	45	54	58	58	52	46	53	48	58	63	65	66	66	57	58	53	54	60	55	56	65	61	50.7
	Minimum	31	20	8	7	15	25	28	30	30	30	33	46	40	31	29	30	42	32	38	38	42	44	38	32	35	31	27	41	32	38	32	31.5
Greensburg	Maximum	59	40	25	17	25	35	45	38	36	43	52	58	55	46	43	55	50	57	66	64	64	63	50	49	54	52	58	56	51	61	59	49 2
	Minimum	37	22	10	1	13	23	23	25	24	17	22	21	38	41	26	20	38	31	36	27	29	33	39	29	26	21	28	33	23	24	25	26.0
Irvington	Maximum	59	28	18	18	28	36	42	35	34	41	47	53	55	50	44	50	48	55	60	60	62	63	57	49	53	51	54	48	48	57	56	47.1
	Minimum	28	18	7	6	18	26	29	24	24	17	36	28	38	38	27	27	40	32	37	37	41	47	37	33	33	34	26	37	33	37	30	29.8
Junction City	Maximum	56	38	34	17	23	36	47	45	35	41	52	54	64	51	43	51	61	56	58	62	63	63	65	50	52	52	58	53	48	59	58	49.8
	Minimum	34	24	11	5	8	22	25	29	24	14	24	20	32	39	29	21	38	35	34	29	29	30	37	33	28	31	20	34	34	25	25	26.5
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	56	30	20	19	27	35	41	34	35	42	48	55	56	48	45	50	48	56	62	61	62	62	55	49	51	51	56	49	49	60	58	47.4
	Minimum	30	18	6	4	15	24	25	22	20	15	22	24	33	35	23	22	38	27	31	33	35	39	35	31	30	31	25	31	28	30	28	26.1
Lexington	Maximum	57	25	16	15	22	32	42	31	30	38	46	53	54	44	39	49	48	52	59	60	61	63	50	46	50	50	55	48	42	55	53	44.7
	Minimum	25	16	3	3	11	22	26	21	20	18	30	29	37	30	29	31	38	33	40	41	46	47	33	33	35	35	38	34	30	34	35	29.1
Louisville	Maximum	59	25	17	15	25	35	41	33	34	41	46	55	54	49	43	48	50	55	60	61	61	63	52	50	51	52	54	47	49	58	56	46.4
	Minimum	25	17	6	6	15	25	30	23	23	20	31	31	40	33	31	31	38	35	41	40	41	49	37	35	35	36	32	39	32	39	33	30.6
Do. (Cherokee Park)	Maximum	43	30	18	15	25	35	36	28	31	40	44	51	53	52	42	48	49	54	58	60	60	64	59	48	51	50	53	50	45	57	53	45.2
	Minimum	30	18	7	4	12	23	26	22	21	16	23	22	35	36	27	24	24	29	31	31	32	42	35	33	29	32	24	32	30	32	25	26.0
St. John	Maximum	59	30	20	11	25	35	40	33	35	41	48	55	55	48	45	49	48	58	60	61	61	62	55	50	57	50	57	50	52	62	57	47.6
	Minimum	29	19	8	6	11	24	27	22	20	10	17	19	32	36	24	24	38	26	30	30	35	38	36	32	31	31	23	31	27	28	27	25.5
Scott	Maximum	56	32	20	18	26	33	41	33	31	41	47	49	53	47	43	50	48	55	58	61	61	62	58	47	51	54	56	48	44	55	53	46.2
	Minimum	32	20	8	2	10	18	25	25	21	13	33	24	35	35	26	25	37	29	33	34	33	42	34	34	30	30	28	33	25	30	24	26.7
Shelbyville	Maximum	56	33	22	16	25	35	40	34	35	39	48	55	54	46	45	49	50	56	60	63	62	65	58	51	51	55	59	50	47	58	59	47.6
	Minimum	30	19	8	3	8	21	22	23	19	10	21	25	31	38	27	23	36	26	30	32	35	39	35	32	30	30	22	25	26	29	23	25.1
Taylorsville	Maximum	57	34	22	16	26	35	42	35	34	40	44	52	54	46	41	50	49	55	56	59	60	63	53	47	51	50	54	47	47	57	54	46.1
	Minimum	33	21	9	6	12	24	25	26	22	15	20	21	26	34	27	21	37	28	26	27	28	34	39	35	28	29	22	29	26	26	23	25.1
Williamstown	Maximum	55	43	34	26	28	34	46	33	32	40	49	52	55	47	54	50	49	55	61	64	63	65	56	49	53	56	59	57	45	55	59	49.2
	Minimum	32	21	8	3	9	21	24	26	21	20	26	25	37	35	28	28	38	30	35	38	41	41	37	33	31	31	32	34	25	37	27	28.2
Eastern Division.																																	
Beattyville	Maximum	53	45	27	19	23	35	48	43	38	37	47	51	52	56	48	53	50	61	63	65	65	63	61	46	52	48	54	48	50	55	53	48.7
	Minimum	43	26	14	5	1	21	20	30	24	13	18	18	20	30	32	19	36	38	27	27	25	28	43	35	27	31	19	29	27	20	23	24.8
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	60	44	28	19	25	34	46	42	34	44	51	55	54	48	44	55	52	55	60	61	63	65	60	52	54	55	58	55	46	60	58	49.6
	Minimum	40	25	14	1	5	20	14	29	24	12	20	24	22	31	30	17	33	34	26	25	20	28	43	34	24	28	23	28	27	20	21	24.0
Harlan	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	51	42	24	16	24	30	41	41	33	39	45	50	48	47	43	44	45	48	52	52	57	59	59	44	50	52	49	45	45	51	51	44.4
	Minimum	41	24	13	6	8	22	23	31	23	13	24	24	27	37	31	21	35	31	31	28	40	33	40	35	28	30	23	31	27	25	24	26.7
Mount Sterling	Maximum	48	34	23	16	26	33	45	32	33	39	47	54	56	45	40	52	45	55	60	64	64	62	59	46	50	46	45	46	46	58	50	45.8
	Minimum	34	22	6	4	4	20	20	21	21	14	25	25	32	38	29	22	25	32	31	40	32	34	41	32	29	30	24	34	26	26	25	25.7
Richmond	Maximum	59	39	25	16	23	33	46	42	35	41	50	57	57	51	42	53	49	57	62	65	65	67	59	50	52	54	61	54	47	60	58	49.3
	Minimum	36	22	12	4	6	20	24	28	24	16	28	26	35	38	28	24	38	33	36	40	40	43	42	32	30	31	27	35	30	32	30	28.7
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	22	24	12	1	0	19	19	33	28	17	18	24	27	34	31	23	35	44	33	31	32	30	43	34	33	31	26	35	35	26	29	26.7
Williamsburg	Maximum	56	38	21	24	18	31	40	41	41	41	53	55	56	50	46	51	51	58	65	64	64	63	64	60	62	54	51	53	54	65	63	50.1
	Minimum	38	18	12	3	11	12	28	32	25	11	14	28	26	31	30	22	39	41	38	32	28	30	31	30	31	34	23	33	31	25	27	26.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[1], [2], [3], etc., indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
NO RAIN
NO RAIN
NO RAIN
Scale of Shades.
0 to 2 inches
2 to 4 inches
4 to 6 inches
6 to 8 inches.
Over 8 inches
Based on about 650 records.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

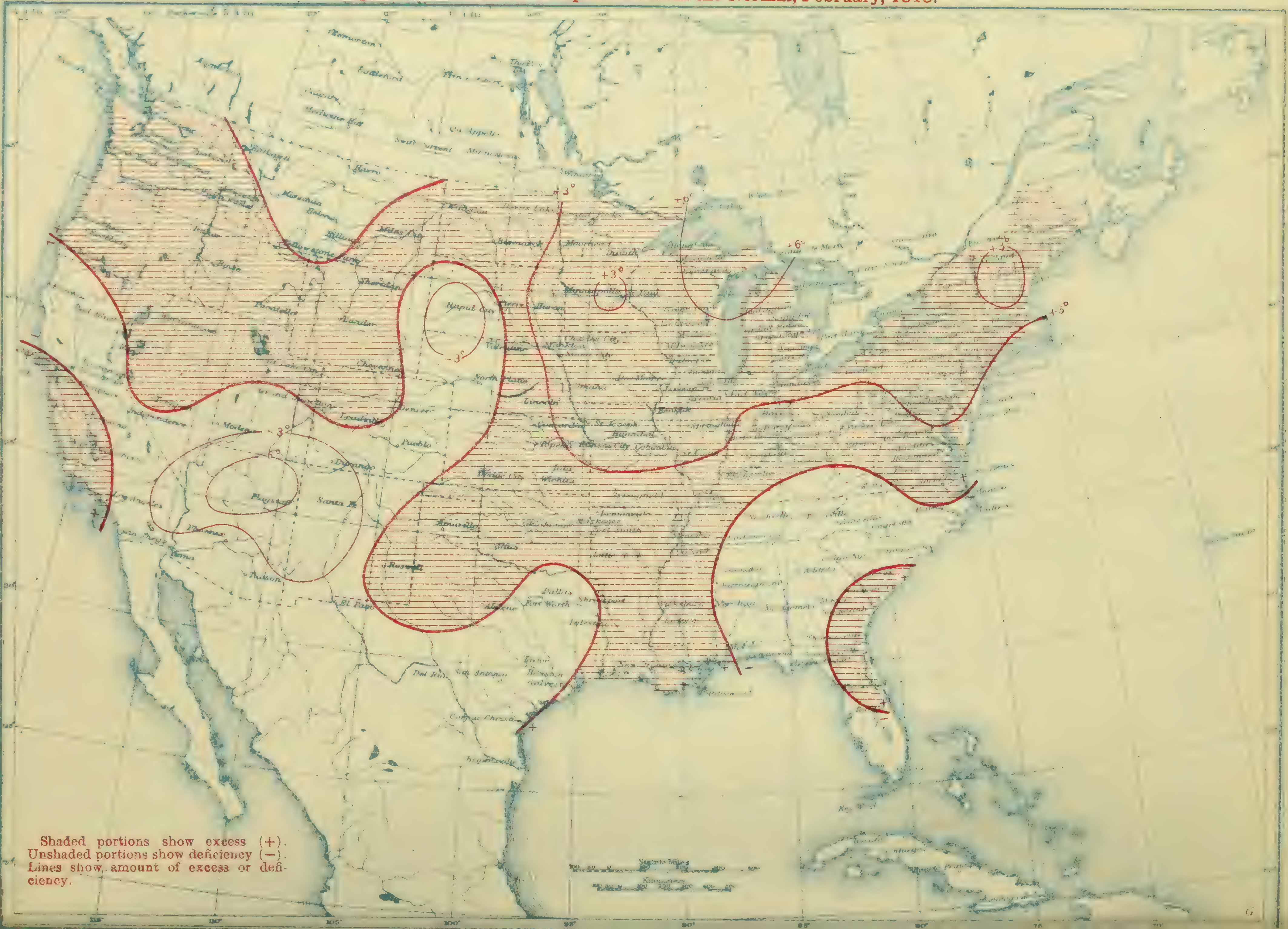
KENTUCKY SECTION

FEBRUARY, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 2, 1919

Departure of the Mean Temperature from the Normal, February, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., FEBRUARY, 1919. No. 2

GENERAL SUMMARY.

The temperature averaged considerably above normal, and was also remarkably uniform, conditions being similar to those prevailing during January preceding. There were no extremes in either direction, maximum temperatures being moderately low and minimum temperatures somewhat higher than usual for this month. Temperatures were low enough to keep most vegetation dormant and prevent fruit buds from swelling.

Precipitation averaged about half of the normal amount, and occurred in the form of light to moderate showers well distributed through the month. There was very little snowfall and practically no snow covering.

The weather was quite favorable for winter grains. What freezes occurred were not injurious because of the comparatively dry soil, and wheat and rye were reported in good to excellent condition at the end of the month There were many days when outdoor work could be carried on, and plowing and seeding were possible practically any time during the month, particularly in the northern counties. Much more work of this character than usual at this time of the year was done, especially of seeding to clover and oats. Many tobacco plant beds were sown—several weeks ahead of the usual period for this work—and farming operations in general were considerably ahead of the season when the month closed.

PRESSURE.

Six low and five high pressure formations dominated weather conditions over this section during the month. Low pressure areas were: (1) A trough of low of moderate strength overspread the entire Mississippi and Ohio valleys on the 3d. (2) During the 12-14th a deep "low" moved from the Rocky Mountain states across the central valleys to the lower Lake region. (3) The 20th-21st (a. m.) a well defined circular "low" moved from Oklahoma across the central Mississippi and Ohio valleys to the lake region. (4) On the 21st (p. m.)-22d, a "low", deepening as it progressed, moved from northern Texas across the central Mississippi and Ohio valleys to the lower lake region and upper Ohio Valley. (5) On the 24th (p. m.) a trough of low extended from Texas northeastward to the lake region, and in the a. m. of the 25th had moved eastward and occupied all the eastern central states from the Lakes to the Gulf. (6) On the 27-28th, a very deep "low" moved from the Rocky Mountain section and Middle West across the Mississippi and Ohio valleys to the lake region; in the p. m. of the 28th this "low", centered in Ontario, extended southward to the east Gulf states.

High pressure areas prevailed during the 1st-2d; 4-10th; 16-19th; 23d, and 26-27th (a. m.).

The mean sea-level pressure, based on the records of two stations, was 30.04 inches. The extremes were 29.20 inches on the 13th at Louisville, and 30.59 inches on the 19th at Lexington.

TEMPERATURE.

The average temperature for the State, 37 stations reporting, was 38.6°, which is 3.0° above normal. Minimum temperatures of 12° to 20° occurred on a few days in the period 5-10th and on the 26th. Maximum temperatures reached 60° on a few days. The extremes were 69° on the 22d at Mt. Sterling; and 12° on the 6th at Beattyville and Farmers and on the 9th at Lone Oak.

PRECIPITATION.

Precipitation for the State, based on the reports of 52 stations, averaged 1.79 inches, about half of the normal amount. It was much below normal in all parts of the State, but was lightest in the extreme northern counties from Meade to Boyd where monthly amounts were only about 1.0 inch. Over central and southern counties amounts ranged generally from 2 to 3 inches. Showers occurred in the periods 3d-4th, 8-16th. 20th-22d, 25-26th, and 28th. In many cases daily amounts were so small as not to interfere with outdoor work. Amounts at the various stations ranged between 0.87 inch at Carrollton, and 3.14 inches at Brownsville.

WIND.

The total wind movement at Louisville was 9,140 miles, and at Lexington 10,330 miles, with average hourly velocities of 13.6 and 15.4 miles, respectively. The maximum velocity for five minutes was at the rate of 60 miles per hour at Louisville and 56 miles at Lexington, from the southwest on the 28th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 78 per cent, at 12 noon 66 per cent, and at 7 p. m. 63 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 45 and at Lexington 35.

MISCELLANEOUS.

Rivers.—The Ohio River declined slowly during the first half of the month, reaching moderately low stages. A slow rise set in about the 18th, continuing generally until the end of the month.

COMPARATIVE DATA FOR FEBRUARY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in or more.
1889	34.1	− 1.5	74	3	1.91	−1.69	
1890	45.6	+10.0	86	16	7.98	+4.38	
1891	42.2	+ 6.6	76	0	4.72	+1.12	
1892	42.2	+ 6.6	70	11	2.92	−0.68	
1893	37.7	+ 2.1	70	3	4.40	+0.80	
1894	34.6	− 1.0	74	2	4.66	+1.06	
1895	25.9	9.7	80	18	0.66	−2.94	5
1896	37.4	+ 1.8	81	−12	3.06	−0.54	9
1897	39.8	+ 4.2	76	8	5.75	+2.15	11
1898	37.4	1.8	77	− 3	1.61	−1.99	6
1899	26.2	− 9.4	71	−33	3.97	+0.37	11
1900	32.5	− 3.1	76	− 9	4.68	+1.08	12
1901	32.4	− 3.2	71	1	1.27	−2.33	6
1902	27.9	− 7.7	69	− 3	1.30	−2.30	7
1903	37.5	1.9	75	−16	7.28	+2.68	9
1904	35.2	0.4	75	− 2	2.32	1.28	7
1905	27.9	7.7	67	−16	2.44	−1.16	9
1906	34.7	− 0.9	75	12	1.81	−1.79	7
1907	35.7	+ 0.1	73	−10	3.06	−0.54	9
1908	35.6	0.0	70	2	5.56	+1.96	13
1909	42.4	+ 6.8	75	8	8.17	+4.57	11
1910	32.9	2.7	66	-12	4.70	+1.10	10
1911	42.0	+ 6.4	80	11	3.25	−0.35	9
1912	29.7	− 5.9	68	-14	3.08	−0.52	7
1913	34.8	− 0.8	77	2	2.94	−0.66	7
1914	32.2	− 3.4	69	2	4.14	+0.54	11
1915	41.9	+ 6.3	75	13	1.74	−1.86	8
1916	35.0	− 0.6	72	- 4	2.99	−0.61	8
1917	34.8	− 0.8	80	9	3.51	−0.09	7
1918	39.3	+ 3.7	83	8	2.04	−1.56	7
1919	38.6	+ 3.0	69	12	1.79	−1.81	9

Climatological data for February, 1919.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	15	39.4	+ 4.2	64	1†	18	9†	38	1.75	−1.63	0.51	1.2	8	16	6	6	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	36	39.8	+ 3.4	61	1	16	9	31	1.74	−2.79	0.53	1.7	10	10	8	10	sw.	E. W. Horr.
Calhoun	McLean	437	14	^{a}39.2	+ 1.9	62^{a}	13	17a	26	33a	1.62	−1.78	0.51	0.5	10	6	13	9	nw.	W. A. Taylor.
Earlington	Hopkins	420	27	39.6	+ 3.3	64	13	18	9	38	2.32	−1.28	0.52	1.0	11	15	0	13	se.	Brick Southworth.
Greenville	Muhlenburg	519	1	39.8		65	13	17	26	36	1.62		0.45		10	14^{c}	5^{c}	6^{c}	n.	C. R. Lovell.
Henderson	Henderson	327	9								1.98	−0.77	0.70	T.	6					W. W. Shelby.
Hopkinsville	Christian	524	21	40.8	+ 3.8	64	13	18	26	39	2.42	−1.47	0.84	0.5	12	13	5	10	e.	W. E. Graves.
Marion	Crittenden	571	19	39.6	+ 3.9	60	13	15	9	33	1.55	−1.82	0.78	2.0	5	11	5	12	w.	B. C. Paris.
Mayfield	Graves	364	8	38.7	+ 1.5	61	1	17	9	32	2.20	−1.63	0.75	1.0	7	9	6	13	n.	J. N. Davis.
Owensboro	Daviess	479	21	39.0	+ 4.3	63	13	19	26	31	1.26	−1.99	0.35	T.	7	9	3	16	s.	Henry S. Berry.
Paducah	McCracken	341	18	39.9	+ 2.5	60	1	12	9	30	1.53	−2.07	0.68	1.1	7	12	1	15	s.	E. Futrell, Jr.
Princeton	Caldwell	529	8	^{c}38.0	+ 2.8	61^{c}	13‡	18^{c}	9†	35	2.48	−2.58	1.45	1.0	7	11^{c}	0^{c}	14^{c}	s.	Ray Baker.
Russellville	Logan	590	6																	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	24	40.4	+ 1.9	65	22	18	6	34	2.22	−2.28	1.10	1.2	4	10	0	18	w.	W. W. Hicks.
Anchorage	Jefferson	700	17	36.4	+ 4.3	66	13	14	6	38	1.04	−2.10	0.24	1.0	8	12	1	15	nw.	C. E. Barret.
Bardstown	Nelson	637	21	38.6	+ 4.1	68	13	16	6	40	1.79	−2.12	0.40	T.	9	15	5	8	w.	Chas. M. Talbott.
Bowling Green	Warren	500	27	40.9	+ 3.7	65	13	20	10†	37	2.93	−1.74	1.00	T.	8	12	12	4	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	0								3.14		0.95	0.7	13					James H. Young.
Burnside	Pulaski	773	25								2.62	−1.64	0.54	1.5	9					C. L. Hurt.
Carrollton	Carroll	492	18								0.87	−2.01	0.30		8					Charlie Oliver.
Cloverport	Breckenridge	375	4								2.57		0.62	0.2	9					W. A. Cockerill.
Edmonton	Metcalfe	600	24																	P. W. Ray.
Eubank	Pulaski	1177	23	^{b}38.3	− 5.0	68^{b}	22	15^{b}	6	37^{b}	1.73	−2.36	0.60	2.0	7	8^{b}	4^{b}	14^{b}	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	25	38.7	+ 3.9	67	13	18	6	28	1.21	−2.35	0.35	T.	10	10	3	15	s.	Mrs. Amelia Wood
Franklin	Simpson	691	22	40.9	+ 2.3	65	13	19	26	35	3.03	−1.86	0.93	1.7	9	10	7	11	se.	V. P. Atkinson.
Greensburg	Green	581	25	39.1	+ 5.4	67	14	17	6	40	2.13	−1.89	0.85	1.0	12	9	1	18	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	15								1.63	−1.83	0.44	1.0	10					Miss Lulu Wood.
Irvington	Breckenridge	646	20	38.1	+ 3.8	64	13	18	26	29	1.04	−2.29	0.39	T.	7	10	1	17	w.	W. J. Piggott.
Lebanon	Marion	681	19																	
Junction City	Boyle	985	24	38.1	+ 5.0	66	22	16	6	38	2.06	−1.57	0.68	1.5	13	6	14	8	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	22	37.4	+ 3.4	64	13	15	10	34	1.52	−2.26	0.60	1.5	9	8	8	12	sw.	John E. Stone.
Lexington	Fayette	989	30	36.0	− 0.4	64	13	17	26	38	1.61	−1.62	0.43	1.3	13	6	8	14	nw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	45	37.8	+ 1.2	65	13	19	26	37	0.99	−2.76	0.42	0.9	9	9	6	13	s.	U. S. Weather Bureau
Do. (Cherokee Park).	Do.	534	8	36.8	+ 1.6	65	13	17	26	32	1.28	−1.68	0.36	1.3	10	9	5	14	s.	Wm. I. Hunt.
St. John	Hardin	777	21	38.6	5.6	64	13	18	26	33	1.61	−2.37	0.53	0.9	11	12	5	11		Sisters of Loretto.
Scott¶	Kenton	900	20	35.9	5.2	64	13	16	5‡	32	1.46	−1.29	0.34	2.0	12	6	8	14	s.	E. B. Wilson.
Shelbyville	Shelby	825	29	36.8	+ 3.0	66	13	15	26	35	1.52	−2.28	0.30	0.8	11	8	6	14	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	15	37.7	+ 3.3	66	13	17	6	34	1.37	−2.40	0.36	0.7	12	8	6	14	sw.	E. D. Bourne.
Williamstown	Grant	943	15	37.1	+ 6.1	65	22	17	6†	32	1.13	−1.84	0.28	2.3	12	8	8	12		Miss Rose Carter.
Woodbury	Butler	533	0								2.51		0.72	T.	7					Virgil M. Whalin.
Eastern Division.																				
Beattyville	Lee	650	14	38.6	+ 4.1	67	13	12	6	44	1.53	2.57	0.32	T.	9	6	4	18	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	16																	H. E. Way.
Catlettsburg‡	Boyd	534	29								0.98	−2.53	0.22	0.2	9					Forester Farley.
Cynthiana	Harrison	684	0								1.30		0.40	T.	4					P. H. Kehoe.
Falmouth	Pendleton	600	29								1.56	−1.80	0.45	T.	9	6	6	16	e.	J. V. Oldham.
Farmers	Rowan	668	10	37.4	+ 1.8	67	23	12	6	35	2.16	−1.01	0.65	0.5	7	9	6	13	w.	Durwood Cassity.
Harlan	Harlan	1197	0	^{f}41.8		64^{f}	28	23^{f}	27	36^{f}	2.38		0.72	3.0	11				se.	Will Ward Duffield.
Jackson	Breathitt	776	6								1.45	−1.85	0.40	T.	8					Jas. L. McCoy.
London	Laurel	1190	3								1.77		0.35	1.2	12					C. R. Lee.
Louisa	Lawrence	584	14								1.65	−2.03	0.30	T.	11					Miss Carrie S. Adams.
Maysville	Mason	524	20	36.8	+ 3.8	68	13	16	6†	35	1.05	−2.28	0.28	0.7	10	13	4	11	n.	J. C. Armstrong.
Middlesboro	Bell	1128	21																	B. H. Perkins.
Mount Sterling	Montgomery	930	28	36.8	+ 3.4	69	22	17	8	36	2.48	−1.51	0.62	2.7	10	11	6	11	nw.	W. R. McKee.
Pikeville	Pike	634	12								1.84	−1.44	0.36	T.	11					I. M. Williams.
Richmond	Madison	926	24	38.0	2.7	64	13	17	26	36	2.11	1.53	0.75	1.0	15	9	3	16		J. W. Crooke.
Weeksbury	Floyd	1216	4					15	10		1.35		0.35	2.0	13	16	8	4		O. A. Lunn.
Williamsburg	Whitley	939	20	40.2	+ 2.7	68	22	15	10	39	2.21	1.28	0.50	3.0	9	9	3	16	w.	N. C. Jones.
State averages and extremes				38.6		69	22	12	6†	44	1.79		1.45	1.1	9	11	5	12	w.	

All temperature data are taken from self-registering thermometers.

Total departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ‡‡ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for February, 1919.

Stations		Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																	
Beaver Dam	G								.07				.38			.05					.51	.26	.10			.33			.05				[illegible]
Blandville	M		.02	.19				T	.15				T	.26	.04	.03					.53		.34		.08				.10				[illegible]
Calhoun	G			T	.03				T	.05			T	.28	.04	.03	T.				.51	.03	.25			.30			.10				[illegible]
Earlington	G			.07	.05				T	.08				.48	.03	.04					.52	.32	.31			.02			.40				2.32
Greenville	G							.05		.05				.32	.03	.07					.45	.02	.15			.40			.08				1.62
Henderson‖	O				.03									.14	.48	T.						.70	.28	T.		.05							[illegible]
Hopkinsville	C			.03				.17		.02				.35	.01	.03	.02				.66	.10	.08			.84			.11				[illegible]
Marion	O								.20					.13	.03						.78			.11									1.55
Mayfield‖	M				.05				.10	.10				.50		T					.75		.50			.20							[illegible]
Owensboro	O			T						T	T			.21		.21	T				.35	.11	.15			.09			.14				1.26
Paducah	O			.04						.02				.42			.01				.68	.11	.25										[illegible]
Princeton	G									.05				.63							*	*	1.45	.05		.30							2.48
Russellville‖	G																																
Central Division																																	
Alpha	C			T	T					.12		T		T.	T	T.					1.10					.55			.45				2.22
Anchorage	O			T								.02		.21	.13	.08					.24	.14	.09			.13			T.				1.04
Bardstown	S				.15									.12		.15	.05				.40	.25	.20			.35			.12				1.79
Bowling Green	G		T	.25				.15		.10		.03			T.						1.00		.25			1.00			.15				2.93
Brownsville	G			.02	.14				.22	.05			T	.42	.06	.14	.02					.74	.20	.02		.95	.16						3.14
Burnside	C				.18				.05	.10				.32		.25						.45	.28	T.		.54	.45						2.62
Carrollton	O				.02								.01	.23	.03	.16						.30	.05	T.		.07							0.87
Cloverport	O				T							T		.38	.62	.49	.22					.58	.10	.06		.07	.05						2.57
Edmonton	G																																
Eubank	C				.16					.08				.20		.08							.50			.60	.11						1.73
Frankfort	K				.11	T					T		T	.26	.05	.03	.03		T			.23	.10	.03		.35	.02						1.21
Franklin	G		T	.15	.02			T		.07		T		.40	T	.04	T.				.55		.82			.93			.05				3.03
Greensburg	G			.21	.05			.06		.10		.01		.11	.08	.05	T.				.48	.07				.85			.06				2.13
High Bridge	K				.21				.05					.14	.02	.05	.05					.32	.27			.44	.08						1.63
Irvington	O			T	.03					T		T		.11	T.	.09					.39		.13			.20			.09				1.04
Junction City	K		.02	.10	.05			.02	T.	.05			T	.05	.15	.08					.25	.10	.23	T.	T.	.68	T.		.28				2.06
Lebanon	S																																
Leitchfield	G			.06				T.		.05				.28	*	.20					.60		.07			.15			.11				1.52
Lexington ***	K			[illegible]	.03			.01		.01		.03		.20	.05	.11					.16	.13	.17			.43			.16				1.61
LOUISVILLE***	O			T.						T		.01		.23	.14	.06					.36	.06	.04			.07			.02				0.99
Do (Cherokee Park)	O			T.	.04					T		.04		.20	.14	.09	.02				.36	.20	.08	T		.11							1.28
St. John	S			.07				.01		T				.34	.08	.05	.04				.53	.25	.10	T		.04			.10				1.61
Scott	L			T.	.15					.01		.05		.13	.06	.16	.02	T.			.19	.16	.05			.14			.34				1.46
Shelbyville	S			.02							T	.04	T	.20	.08	.16	.02				.21	.13	.16			.30	T.		.20				1.52
Taylorsville	S			.02	.08					T	T	.01		.17	.07	.06	.01				.26	.06	.14			.36			.13				1.37
Williamstown	L			.05	.06					.03	T	.05		.28	.02	.25	.03				.11	.07	.03				T.		.15				1.13
Woodbury‖	G				.17				.18	T.			T.	.44		T.	T.					.72	.14			.83	.03						2.51
Eastern Division																																	
Beattyville‖‡	K				.15	T.				T	.01		T	.19	T	.08	.07	T.				.30	.15	T		.32	.26						1.53
Berea	K																																
Catlettsburg ‖	B				.15						.02			.16	.08	[illegible]	.03				.11	.05					.22						0.98
Cynthiana	L			T.	T	T					T.		T.	.40		.25	T.		T			.35	T.			.30							1.30
Falmouth ‖	L		.03	.20							T			.45		.15	.06					.29	.10	.03		.25	T.						1.56
Farmers	L			.25								T.	.08	.30	.23	.30	.18					.17					.65						2.16
Harlan	K			.13	.02				.04			.30		.12	.17	T	.08				.20		.72			.40			.20				2.38
Jackson	K			T.	.20				T					.20	.15	.05						.40	.15			.25	.05						1.45
London	C				.10	.02			.10	.10				.10	.21	.06					T	.20	.20	.05		.35	.28						1.77
Louisa	B					.15	T		.06		T			.19	.24	.17	.04					.11	.13	.01		.25	.30						1.65
Maysville‖‖	O				.05						T		.05	.28	.06	.15	.01					.25	[illegible]	T	.10	.03	T.						1.05
Middlesboro	C																																
Mount Sterling	L			T	.18			T.	.02	T.	T	.08	T	.32	.15	.22	T				.21		.20	T		.48	T.		.62				2.48
Pikeville	B				.18	T			.04	T.	.06		T	.24	T	.08	.06					.26	.18	.12		.26	.36						1.84
Richmond	K			T	.08				.01	.03	.01	.02	T	.19	.03	.16	.02				.22	.03	.26			.29	.01		.75				2.11
Weeksbury	B		.01		.19				.06	.06	.01	.02		.02	.08	.13	.02				.25					.25	.15						1.35
Williamsburg	C				.17				.15	.20	T	T	T	.10	T	.16	T.	T				.27	.50			.28	.38						2.21

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T Trace, or less than 0.01 inch.

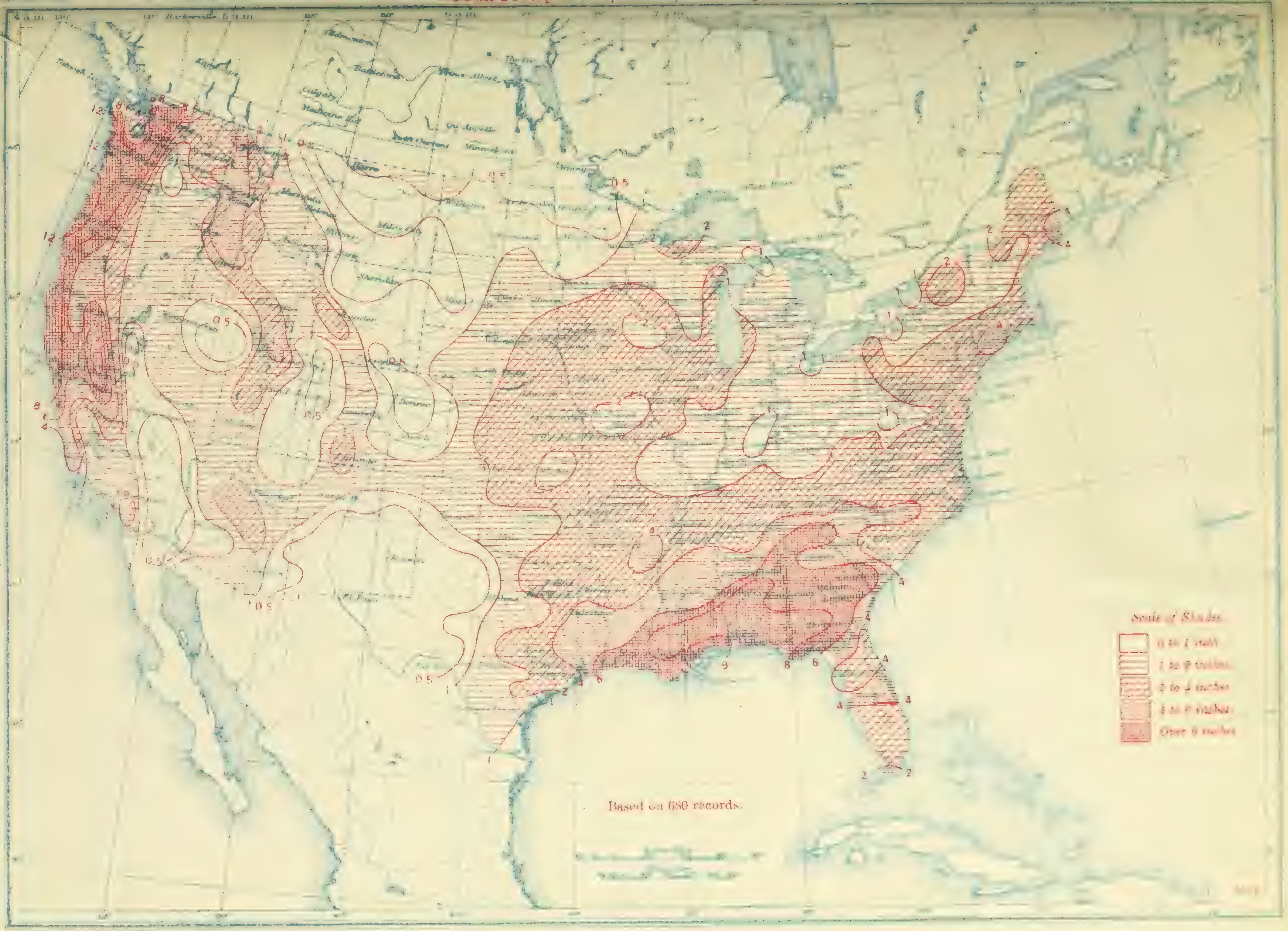
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for February, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	64	53	49	43	44	42	46	36	42	45	55	55	64	55	39	34	54	54	50	50	51	56	49	48	61	42	60	58	..	..	..	50.0
	Minimum	26	32	29	26	20	23	23	20	18	29	34	34	33	36	31	29	26	24	26	34	39	35	36	32	29	18	22	42	..	..	..	28.8
Blandville	Maximum	61	52	55	51	38	42	41	32	33	39	59	60	58	48	34	39	59	50	50	56	54	45	49	55	52	42	56	57	..	..	..	48.8
	Minimum	36	39	47	28	24	25	32	24	16	17	32	42	45	32	24	28	30	30	29	37	38	35	36	33	26	19	29	26	..	..	..	30.7
Calhoun	Maximum	57	52	51	48	40	47	43	..	32	39	55	55	62	59	35	33	51	49	49	48	47	49	48	58	54	39	57	56	..	..	..	^{a}48.6
	Minimum	31	32	43	28	20	21	28	..	18	19	29	35	51	34	29	28	26	26	25	33	40	33	35	30	30	17	24	36	..	..	..	^{a}29.7
Earlington	Maximum	61	51	52	49	42	48	42	37	36	44	57	57	64	50	34	35	55	53	53	51	49	51	52	61	56	46	61	50	..	..	..	49.9
	Minimum	29	35	45	30	22	19	25	24	18	20	32	35	47	33	30	30	29	24	27	35	30	35	37	30	29	19	23	29	..	..	..	29.3
Greenville	Maximum	62	52	54	52	39	49	44	40	36	40	56	56	65	63	48	35	54	48	50	50	52	53	48	59	57	40	58	58	..	..	..	50.6
	Minimum	30	33	44	29	22	18	26	22	18	24	29	34	51	33	30	27	26	26	25	34	42	35	35	30	30	17	22	34	..	..	..	29.1
Hopkinsville	Maximum	63	56	52	48	42	49	45	40	41	43	59	56	64	59	35	35	57	54	55	50	53	56	51	61	55	43	62	57	..	..	..	51.5
	Minimum	42	36	45	30	23	20	28	24	20	21	30	35	51	33	30	27	26	25	28	37	28	37	36	30	31	18	23	32	..	..	..	30.2
Marion	Maximum	58	57	51	51	39	46	47	41	32	35	50	55	60	50	36	40	54	54	50	50	50	55	50	59	53	40	57	56	..	..	..	49.1
	Minimum	33	34	43	27	21	22	30	22	15	20	28	40	50	22	33	28	27	25	33	34	38	37	36	31	30	18	24	38	..	..	..	30.0
Mayfield §§	Maximum	61	51	53	42	40	47	42	29	35	40	58	59	59	37	34	37	59	51	51	56	48	51	51	56	49	42	52	35	..	..	..	47.3
	Minimum	33	40	42	29	25	25	32	25	17	18	26	33	44	35	30	27	28	30	28	29	39	36	36	33	35	20	22	27	..	..	..	30.1
Owensboro	Maximum	54	48	52	42	35	46	43	31	35	40	55	55	63	61	45	33	50	49	48	48	44	50	53	48	48	40	57	50	..	..	..	47.2
	Minimum	29	33	40	29	21	24	27	23	21	20	29	35	52	45	30	29	27	26	27	35	37	40	35	31	40	19	26	30	..	..	..	30.7
Paducah (Lone Oak)	Maximum	60	58	56	46	38	46	44	43	32	39	58	58	59	50	34	38	56	54	51	55	54	46	49	48	44	41	56	58	..	..	..	49.0
	Minimum	36	34	33	29	24	25	34	24	12	18	32	42	48	32	30	28	28	30	30	36	40	35	36	34	29	20	26	36	..	..	..	30.8
Princeton §§	Maximum	..	59	51	39	38	47	41	32	29	41	56	56	61	36	38	30	55	49	50	..	51	49	50	61	48	..	60	59	..	..	..	^{c}47.4
	Minimum	34	..	45	29	22	22	24	23	18	19	21	36	33	33	29	30	25	25	27	32	..	37	36	29	30	18	..	41	..	..	..	^{c}28.7
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	58	50	49	47	37	48	40	36	32	38	36	59	62	53	41	32	44	47	50	50	54	65	40	64	50	47	58	60	..	..	..	48.1
	Minimum	29	30	47	35	25	18	23	22	25	21	25	45	53	41	32	29	29	29	27	35	49	40	36	30	37	21	30	53	..	..	..	32.7
Anchorage	Maximum	54	42	54	47	38	44	41	38	31	40	42	48	66	60	36	33	48	46	44	42	54	61	40	52	49	38	57	61	..	..	..	46.6
	Minimum	26	26	38	26	17	14	21	23	21	22	23	32	45	34	29	28	26	18	22	29	37	29	32	24	29	16	19	25	..	..	..	26.1
Bardstown	Maximum	57	50	54	48	41	47	43	46	38	43	43	54	68	63	38	36	50	50	48	43	54	60	49	52	58	40	61	63	..	..	..	49.9
	Minimum	22	27	28	33	20	16	24	26	23	23	23	31	36	35	30	29	27	22	24	30	35	36	26	30	32	22	21	32	..	..	..	27.2
Bowling Green	Maximum	60	50	52	48	41	45	47	37	36	42	52	54	65	61	39	36	55	55	52	53	59	64	52	60	55	44	60	61	..	..	..	51.4
	Minimum	32	31	43	31	24	23	21	28	24	20	27	34	49	35	33	31	27	28	28	26	33	39	37	27	32	20	23	46	..	..	..	30.4
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	54	48	49	49	45	45	42	36	33	30	36	56	64	54	49	34	48	45	46	..	..	68	42	63	60	48	59	60	..	..	..	^{b}48.6
	Minimum	30	28	40	35	20	15	25	28	22	21	22	30	43	26	29	28	27	23	25	..	..	32	34	27	35	18	22	44	..	..	..	^{b}28.0
Frankfort	Maximum	51	45	55	48	40	38	41	41	36	36	39	51	67	65	39	34	47	47	42	41	54	63	52	55	55	37	50	63	..	..	..	47.6
	Minimum	27	26	39	32	20	18	22	29	23	26	27	33	45	38	32	31	30	25	24	31	39	36	36	28	35	19	22	40	..	..	..	29.8
Franklin	Maximum	60	55	52	48	38	48	39	40	35	43	51	53	65	61	37	34	55	50	51	49	60	63	51	60	55	42	59	60	..	..	..	50.5
	Minimum	34	33	46	31	24	20	27	28	25	20	28	35	52	34	30	28	28	28	27	37	43	40	36	30	33	19	24	36	..	..	..	31.3
Greensburg	Maximum	60	54	52	47	41	44	43	39	36	38	40	57	63	67	37	33	52	47	48	44	53	65	51	62	56	38	60	64	..	..	..	49.7
	Minimum	24	25	40	30	21	17	22	28	23	18	23	30	45	35	27	29	26	24	25	31	42	37	35	26	35	18	20	42	..	..	..	28.5
Irvington	Maximum	49	44	53	47	36	42	43	37	32	38	49	50	64	61	36	35	49	45	45	46	49	56	41	57	53	38	55	58	..	..	..	46.7
	Minimum	30	29	40	29	20	22	27	22	21	21	29	37	45	36	30	29	28	27	26	32	37	36	36	32	31	18	26	31	..	..	..	29.5
Junction City	Maximum	50	43	51	52	39	42	55	37	35	36	38	57	65	59	41	32	48	45	45	42	56	66	54	60	59	42	59	61	..	..	..	48.7
	Minimum	21	23	36	32	17	16	20	27	22	23	18	32	45	40	28	28	27	23	21	28	38	33	34	24	34	18	21	41	..	..	..	27.5
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	51	47	52	45	37	42	42	37	32	37	48	53	64	55	34	32	51	45	46	46	50	59	42	58	52	39	56	58	..	..	..	46.8
	Minimum	30	28	35	28	20	20	26	24	20	15	24	33	50	32	28	27	23	24	24	31	40	35	35	28	30	17	22	32	..	..	..	27.9
Lexington	Maximum	44	41	53	45	34	37	40	35	26	33	35	51	64	49	31	30	44	41	40	42	53	64	36	57	50	35	57	61	..	..	..	43.9
	Minimum	28	24	40	25	20	22	27	26	20	23	26	32	44	30	28	28	28	28	25	29	38	35	34	33	22	17	30	23	..	..	..	28.0
Louisville	Maximum	48	42	55	47	37	40	41	36	30	38	45	51	65	47	34	33	48	46	45	44	48	56	40	54	53	38	56	60	..	..	..	45.6
	Minimum	32	30	41	27	20	25	30	26	22	27	28	38	45	33	30	29	29	31	28	32	38	36	36	33	24	19	30	23	..	..	..	30.1
Do. (Cherokee Park)	Maximum	44	40	48	37	33	38	41	41	33	38	43	49	65	63	39	34	48	46	43	42	50	58	45	53	53	37	55	59	..	..	..	45.5
	Minimum	26	25	36	29	18	18	22	23	19	24	25	33	46	36	30	28	26	24	23	28	39	34	34	27	30	17	22	46	..	..	..	28.1
St. John	Maximum	56	43	52	47	46	41	41	38	32	38	48	53	64	61	36	34	52	43	44	44	51	60	44	58	53	38	56	59	..	..	..	47.6
	Minimum	29	29	39	30	28	20	26	22	22	19	26	35	47	35	29	28	36	23	25	31	40	34	35	28	32	18	23	43	..	..	..	29.7
Scott	Maximum	45	39	55	47	36	39	41	38	30	37	34	44	64	59	37	32	42	43	41	37	49	60	47	50	49	38	54	62	..	..	..	44.6
	Minimum	22	22	36	30	16	17	21	24	18	22	23	32	43	37	32	27	28	22	22	27	34	38	34	27	31	16	22	38	..	..	..	27.2
Shelbyville	Maximum	53	43	54	46	39	41	40	39	34	40	38	48	66	60	37	33	48	45	44	41	52	62	47	54	53	40	57	62	..	..	..	47.0
	Minimum	25	24	36	29	17	16	23	25	20	23	23	30	31	34	29	27	26	21	22	28	37	32	33	27	30	15	25	37	..	..	..	26.6
Taylorsville	Maximum	48	43	54	47	36	38	41	39	34	37	41	51	66	62	38	34	48	45	46	43	53	62	47	56	51	36	56	63	..	..	..	47.0
	Minimum	24	28	38	31	19	17	21	26	23	25	23	31	46	37	30	29	28	22	24	31	40	33	36	26	32	18	22	36	..	..	..	28.4
Williamstown	Maximum	50	42	54	45	40	42	40	39	30	39	35	46	54	59	48	38	41	42	42	38	52	65	50	53	54	41	55	62	..	..	..	46.6
	Minimum	26	22	37	30	18	17	22	26	19	20	24	32	44	36	31	28	27	23	23	27	34	34	34	27	33	17	23	40	..	..	..	27.6
Eastern Division.																																	
Beattyville	Maximum	59	52	56	47	42	49	44	42	37	38	39	61	67	65	41	33	50	48	47	45	55	61	63	64	53	49	61	63	..	..	..	51.1
	Minimum	20	19	36	36	16	12	16	31	26	20	15	28	36	40	32	30	30	23	17	26	32	33	36	24	40	17	17	27	..	..	..	26.2
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	54	45	58	49	38	43	42	42	36	33	36	55	65	65	43	34	45	45	43	45	43	59	67	57	58	53	44	58	..	..	..	48.4
	Minimum	20	21	36	35	16	12	15	30	22	15	16	22	37	38	29	29	29	23	27	28	28	38	32	31	31	24	29	26	..	..	..	26.4
Harlan	Maximum	..	..	63	53	42	49	53	43	33	..	..	..	58	57	40	32	37	48	52	54	..	61	50	63	53	49	59	64	..	..	..	^{f}50.6
	Minimum	..	..	34	41	32	30	33	32	25	..	..	..	46	38	31	29	28	29	23	30	..	43	36	27	43	33	23	40	..	..	..	^{f}33.0
Maysville	Maximum	41	42	48	48	38	35	40	40	35	32	33	50	68	63	42	34	44	44	40	40	52	61	60	54	54	38	54	61	..	..	..	46.1
	Minimum	24	20	36	35	20	16	17	29	22	16	19	26	37	42	33	31	30	25	20	29	36	35	36	25	38	24	19	32	..	..	..	27.6
Mount Sterling	Maximum	45	42	57	45	35	40	41	39	32	33	34	53	63	59	37	32	45	42	41	39	57	69	58	57	51	37	58	63	..	..	..	46.6
	Minimum	25	22	36	30	17	18	21	17	22	19	19	29	41	35	29	28	27	24	21	28	35	43	34	28	34	18	22	36	..	..	..	27.1
Richmond	Maximum	52	46	54	47	38	42	41	41	36	33	36	56	64	62	38	31	47	46	47	44	57	68	52	60	57	40	60	63	..	..	..	48.5
	Minimum	27	23	38	30	19	18	22	28	22	20	21	31	42	36	28	27	22	24	22	28	37	57	33	29	37	17	24	30	..	..	..	27.6
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	25	21	36	42	24	19	22	22	21	15	18	31	37	40	32	28	24	23	21	26	27	24	25	30	45	30	21	20	..	..	..	26.8
Williamsburg	Maximum	61	58	57	51	39	47	47	47	38	37	42	47	53	61	37	32	51	51	52	47	58	68	58	62	56	46	61	64	..	..	..	51.0
	Minimum	23	29	35	36	21	17	20	28	18	15	30	31	37	36	32	27	30	28	20	28	42	50	32	36	42	22	22	40	..	..	..	29.5

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades.
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
Based on 680 records.
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Qu'Appelle
Winnipeg
Miles City
Sheridan
Denver
El Paso

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

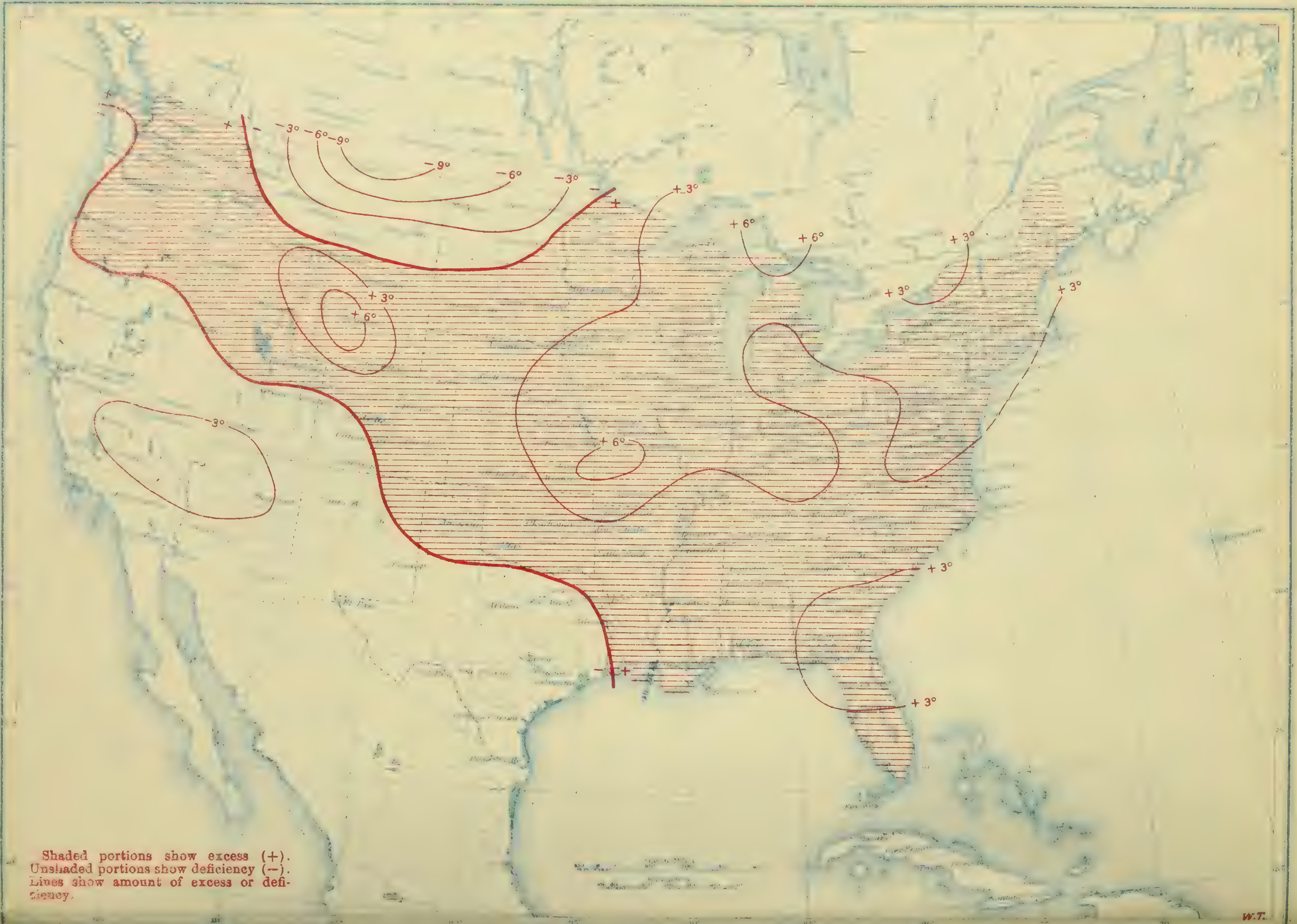
KENTUCKY SECTION

MARCH, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 28, 1919

Departure of the Mean Temperature from the Normal, March, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., March, 1919. No. 3

GENERAL SUMMARY.

The temperature averaged somewhat above normal, but registered below freezing frequently at night. The cool nights and heavy frosts held vegetation in check to some extent, especially the buds of peaches and pears, which showed a tendency to develop prematurely. Except for the heavy rains near the middle of the month, weather conditions during March were favorable for winter grains, the sowing of oats, grass, and tobacco seed. At the close of the month farming operations were fully abreast of the season, tobacco plants, oats, and clover were coming up, peaches were beginning to bloom, while the prospect for wheat was never excelled in this State.

The rainfall averaged considerably above normal, but was unevenly distributed. Almost double the normal amount occurred in many of the western counties, while in the east-central and mountain counties amounts were generally less than normal. The heavy rains occurred mainly over the principal farming districts, and interfered seriously with plowing; but on account of the exceptional progress in this work during February and the first half of March, soil preparation was generally well advanced for the season. More tobacco plant beds than usual were sown. Pastures were in especially fine condition at the end of the month, being ready for grazing in the southern and western counties.

PRESSURE.

High pressure areas dominated weather conditions over this section during most of the month—prevailing during the 1st-3d; 5 (p. m.)-8th (a. m.); 9 (p. m.)-14th; 18-25th; 28-29th, and 31st. Those of the 9-14th and 18-25th were exceptionally strong and persistent.

Low pressure areas were: 4(p. m.)-5th (a. m.), a shallow trough accompanied by moderate to heavy rains; 8(p. m.)-9th (a. m.), a well developed "low" moving rapidly northeastward from the west Gulf coast and producing moderate to heavy rains; 15-16th, a shallow "low" moving rapidly northeastward, attended by light precipitation over this section, and closely followed by the disturbance of the 16-17th, the most important of the month, which was centered in Oklahoma on the 16th (p. m.) and over Illinois on the morning of the 17th, increasing in energy as it moved northeastward and attended by excessive rains over most of this State; 26-27th, a shallow trough drifting eastward, but attended by heavy rains.

The mean sea-level pressure, based on the records of two stations, was 30.20 inches. The extremes were 29.50 inches at Louisville on the 9th, and 30.57 inches at Louisville and Lexington on the 22d.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 47.6°, which is 1.6° above normal. The coldest days were the 1st and 2d, with minimum temperatures ranging generally between 16° and 25°; otherwise mild temperature prevailed. The extremes were 81° at Beattyville on the 25th, and 16° at several stations on the 1st.

PRECIPITATION.

Precipitation for the State, based on the reports of 51 stations, averaged 5.65 inches, which is 0.99 inch in excess of normal. In the upper basins of the Licking and Kentucky rivers, and over the mountain counties, monthly amounts ranged between 2.5 and 4 inches. Over the west-central and western counties amounts ranged generally from 5 to 8 inches, exceeding 9 inches in Edmonson and Warren counties. At the various stations they ranged between 2.43 inches at Berea and 9.61 inches at Bowling Green. Good rains were general on the 5th, 8-9th, 14-17th, and 26-27th. Very heavy rains, with 24-hour amounts ranging from 2 to 5 inches, occurred in the central and western counties on the 16th and 17th.

WIND.

The total wind movement at Louisville was 9,621 miles, and at Lexington 10,686 miles, with average hourly velocities of 12.9 and 14.4 miles, respectively. The maximum velocity for five minutes was at the rate of 56 miles per hour at Louisville and 68 miles at Lexington, from the southwest on the 17th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 74 per cent, at 12 noon 54 per cent, and at 7 p. m. 57 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 63 and at Lexington 46.

MISCELLANEOUS.

March 17.—A residence at Hickman was struck by lightning. Two buildings were unroofed and one man was killed by lightning during a storm at Camp Knox, near Stithton. The Ohio River steamer John L. Lowrey was overturned and sunk by a windstorm at Kincaid's Landing, near Paducah, with a loss of about $75,000. Considerable damage was caused in the western counties by flooding lowland, washouts on railroads and highways, and flooding of dwellings and business houses. Probably the worst conditions were experienced in the Green River basin, especially at Hopkinsville, Russellville, and in Daviess and McLean counties.

(Continued on next page.)

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	40.5	- 5.5	84	18	1.52	−3.14	
1890	41.2	− 4.8	78	4	8.34	+3.68	
1891	41.8	− 4.2	71	6	8.08	+3.42	
1892	40.6	5.4	82	5	4.08	−0.58	
1893	45.0	− 1.0	89	9	2.76	−1.90	
1894	50.8	+ 4.8	86	17	2.72	−1.94	
1895	45.0	1.0	88	15	3.17	−1.49	9
1896	41.1	− 4.9	80	8	6.16	+1.50	12
1897	49.6	+ 3.6	86	20	7.94	+3.28	14
1898	50.7	+ 4.7	84	16	7.59	+2.93	13
1899	43.9	− 2.1	80	3	8.10	+3.44	15
1900	42.8	− 3.2	81	3	2.58	−2.08	9
1901	46.4	+ 0.4	87	3	3.50	−1.16	10
1902	47.2	+ 1.2	82	7	4.44	−0.22	11
1903	52.5	+ 6.5	85	19	4.43	−0.23	12
1904	47.7	+ 1.7	88	12	6.26	+1.62	12
1905	52.2	+ 6.2	86	22	4.45	−0.21	9
1906	39.2	− 6.8	75	3	6.37	+1.71	16
1907	54.9	+ 8.9	92	18	2.28	−2.38	10
1908	51.8	+ 5.8	88	19	5.42	+0.76	13
1909	44.8	− 1.2	74	17	5.14	+0.48	11
1910	55.0	+ 9.0	91	11	0.79	−3.87	3
1911	46.0	0.0	87	7	2.57	−2.09	9
1912	41.3	− 4.7	88	10	6.22	+1.56	15
1913	46.5	+ 0.5	85	9	7.22	+2.56	10
1914	41.8	− 4.2	78	2	3.62	−1.04	12
1915	37.8	8.2	65	11	2.11	−2.55	8
1916	43.5	2.5	84	4	3.39	−1.27	10
1917	45.9	− 0.1	84	6	6.52	+1.86	14
1918	51.6	+ 5.6	85	17	1.97	−2.69	8
1919	47.6	+ 1.6	81	16	5.65	+0.99	9

Climatological data for March, 1919.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	48.6	+ 1.9	79	25	18	1	44	4.72	+0.81	1.40	0	8	18	7	6	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	49.5	+ 2.4	71	4	17	1	36	8.02	+3.39	4.01	0	7	13	5	13	ne.	E. W. Horr.
Calhoun	McLean	437	15	49.2	− 0.1	79	25	16	1	39	7.93	+3.96	2.71	T.	9	11	15	5	nw.	W. A. Taylor.
Earlington	Hopkins	420	28	49.9	+ 2.6	80	25	18	1	42	8.16	+3.28	2.66	0	10	19	1	11	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	49.8	......	79	25	16	1	39	7.80	......	2.60	T.	7	16	14	1	w.	C. R. Lovell.
Henderson	Henderson	327	11	.....	.....	.....	.....	.....	.....	.....	6.10	+1.32	2.90	0	8	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	22	49.6	+ 0.4	79	25	18	1	41	7.89	+3.05	2.70	T.	8	17	8	6	ne.	W. E. Graves.
Marion	Crittenden	571	20	48.8	+ 0.2	73	25	17	2	40	7.60	+2.81	2.38	0	6	12	11	8	w.	B. C. Paris.
Mayfield	Graves	364	9	b47.3	− 4.1	71c	20†	19a	1	31	5.67	+1.61	3.10	T.	9	12b	8b	9b	s.	J. N. Davis.
Owensboro	Daviess	479	22	48.6	+ 1.7	76	25	18	1	34	6.30	+1.52	2.37	T.	10	17	6	8	s.	Henry S. Berry.
Paducah (near)	McCracken	341	19	49.0	− 1.4	70	4†	18	1	38	8.61	+4.18	2.25	0	8	20	0	11	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	a48.3	0.0	78a	25	17a	1	43	7.34	+2.13	......	0	7	19a	0a	11a	n.	Ray Baker.
Russellville	Logan	590	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	25	48.8	− 1.9	75	25	23	1	36	3.95	−2.22	0.95	T.	5	19	0	12	w.	W. W. Hicks.
Anchorage	Jefferson	700	18	45.5	+ 0.4	77	25	16	1	44	6.78	+2.80	1.78	T.	9	16	4	11	nw.	C. E. Barret.
Bardstown	Nelson	637	22	48.2	+ 1.6	74	25	18	1	38	6.75	+2.06	2.25	T.	10	20	3	8	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	50.6	+ 2.3	79	25	20	1	42	9.61	+4.69	3.00	0	9	16	6	9	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	.....	.....	.....	.....	.....	.....	.....	9.59	.....	5.25	T.	11	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	26	.....	.....	.....	.....	.....	.....	.....	4.23	−1.04	0.88	T.	8	.....	.....	.....	.....	F. E. Bradshaw.
Carrollton	Carroll	492	20	.....	.....	.....	.....	.....	.....	.....	5.50	+2.17	1.92	T.	10	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	5	.....	.....	.....	.....	.....	.....	.....	6.19	.....	3.96	T.	10	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. W. Ray.
Eubank	Pulaski	1177	24	47.0	+ 0.7	76a	25	18a	1	40	3.05	−2.20	0.76	T.	7	11a		15a	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	48.0	+ 1.8	74	25	20	1	42	5.47	+0.77	2.30	T.	11	13	7	11	n.	Mrs. Amelia Wood
Franklin	Simpson	691	23	49.0	− 1.1	78	25	18	1	38	7.75	+3.00	2.80	T.	7	17	5	9	n.	V. P. Atkinson.
Greensburg	Green	581	26	46.6	− 0.2	78	25	17	1	48	4.71	−0.32	1.33	T.	9	12	2	17	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	.....	.....	.....	.....	.....	.....	.....	4.37	+0.16	1.80	T.	8	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	21	47.6	+ 0.8	75	25	16	1	33	5.93	+1.33	1.92	T.	7	18	3	10	sw.	W. J. Piggott.
Lebanon	Marion	754	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Junction City	Boyle	985	25	46.4	+ 0.3	75	16†	16	1	45	3.58	−1.53	0.95	0.8	9	16	5	10	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	23	47.0	+ 1.0	75	25	17	1	36	5.10	+0.31	......	0	8	15	8	8	ne.	John E. Stone.
Lexington	Fayette	989	31	45.6	+ 2.2	73	25	19	1	29	3.71	−1.01	1.42	T.	11	13	4	14	ne.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	47.8	+ 2.5	75	25	19	1	32	5.72	+1.40	2.94	T.	9	13	9	9	ne.	U. S. Weather Bureau.
Do Cherokee Park	Do	534	9	44.8	− 0.5	70	4†	16	1	36	6.26	+2.42	3.06	T.	9	15	5	11	s.	Wm. I. Hunt.
St John	Hardin	777	22	47.4	+ 2.3	76	25	25	1†	38	7.98	+2.99	2.50	0	9	18	3	10	.....	Sisters of Loretto.
Scott¶	Kenton	900	21	44.8	+ 1.4	73	25	17	1	42	6.41	+1.97	1.51	T.	10	12	8	11	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	46.2	+ 1.5	70	4†	16	1	37	7.56	+2.85	2.40	T.	10	17	2	12	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	45.5	− 0.3	75	25	18	1	40	7.46	+3.12	1.85	T.	10	14	4	13	s.	E. D. Bourne.
Williamstown	Grant	943	16	47.2	+ 4.0	77	25	18	1	37	5.70	+1.54	1.70	T.	9	13	9	9	.....	Miss Rose Carter.
Woodbury	Butler	533	1	.....	.....	.....	.....	.....	.....	.....	7.78	.....	4.23	T.	8	.....	.....	.....	.....	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	47.6	+ 2.9	81	25	21	2†	52	3.67	−1.66	1.05	T.	11	13	7	11	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	47.7	+ 0.4	76	25	20	1	42	2.43	−2.50	0.60	0.5	8	14	2	15	n.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	.....	.....	.....	.....	.....	.....	.....	2.84	−1.62	0.66	0.5	10	.....	.....	.....	.....	Forester Farley.
Cynthiana	Harrison	684	1	.....	.....	.....	.....	.....	.....	.....	4.00	......	1.40	T.	8	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	30	.....	.....	.....	.....	.....	.....	.....	5.21	+1.12	1.70	T.	9	17	2	12	e.	J. V. Oldham.
Farmers	Rowan	668	11	46.0	+ 1.1	70	21†	21	12†	43	3.33	−1.23	1.00	T.	6	16	9	6	w.	Mrs. Gertrude Thompson.
Harlan	Harlan	1197	1	c49.8	.....	76c	24†	26c	12	47c	3.53	.....	1.58	T.	9	15a	8a	7a	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	.....	.....	.....	.....	.....	.....	.....	3.80	−0.83	0.86	T.	10	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	4	.....	.....	.....	.....	.....	.....	.....	2.84	......	0.60	T	10	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	15	.....	.....	.....	.....	.....	.....	.....	3.38	−0.74	0.87	T.	12	.....	.....	.....	.....	Miss Carrie S. Adams.
Maysville	Mason	521	21	45.4	+ 1.3	72	25	21	1†	42	2.56	−2.08	0.77	T.	10	15	4	12	n.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	29	45.3	+ 1.6	77	25	20	1	40	4.03	−1.38	0.90	0.2	10	20	0	11	nw.	W. R. McKee.
Pikeville	Pike	634	13	.....	.....	.....	.....	.....	.....	.....	4.54	−0.01	1.52	...	10	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	24	47.6	+ 2.2	77	25	18	1	37	.....	.....	.....	T	....	14	6	11	.....	J. W. Crooke.
Weeksbury	Floyd	1216	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. V. Johnson.
Williamsburg	Whitley	939	21	48.2	+ 2.1	75	15	21	1	45	4.53	−0.39	1.42	T.	9	15	5	11	w.	N. C. Jones.
State averages and extremes			..	47.6	...	81	25	16	1	52	5.65	.....	5.25	T.	9	15	6	10	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T. Precipitation is less than 0.01 inch rain or melted snow.

‡ Post office address, Normal, Ky. ‡‡ Nerinx, Ky. ¶ Covington, Ky.

Rivers.—Good stages prevailed during the first half of the month. On the 17th a sharp rise set in in the reaches below Cincinnati caused by the heavy rains of the preceding day. Flood stage was reached at Evansville on the 18th and at Cairo on the 21st, the river remaining above flood stage at Evansville until the 22d and at Cairo until the 28th. The rains were light over the upper basin, and stages above Cincinnati were but little affected. Tributary streams in the western counties were generally at flood stages on the 17th.

Daily Precipitation for March, 1919.

Stations		Day of month																														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G					1.10			.95	.04	.04				.17	.17	1.40	.68									.17						4.72
Blandville	M					1.08			1.05						.30	.09	4.01										1.44						[illegible]
Calhoun	G					.89			.80	.20					[illegible]	[illegible]	.50	2.71									.21				.02	[illegible]	[illegible]
Earlington	G					.95			.83	.15					.71	[illegible]	[illegible]	2.42									.15	[illegible]			.10		[illegible]
Greenville	G					.98			.90	T.					1.00	[illegible]	[illegible]	2.60									.20						[illegible]
Henderson	O	.08				.48				.66					.30	.04	[illegible]	[illegible]	T.								T.	.64					[illegible]
Hopkinsville	C					1.10			.92	.14					.22	.16	2.70	2.41									.24				T		7.89
Marion	O					1.02			.97						1.02		2.38	1.69									.52				T.		[illegible]
Mayfield	M					.25				.16					.10	.10	1.00	3.10									[illegible]	[illegible]			.25		[illegible]
Owensboro	O		.02			.68			.62	.10					.12	.02	2.00	2.37									.35	T			.02	T	[illegible]
Paducah	O					1.40			.92	.03						.24	2.24	2.25									1.20				.33		8.61
Princeton	G					1.10				.95					.02	.25	*	5.00									T.	.02				T	7.31
Russellville	G																																
Central Division.																																	
Alpha	C					.95			.75						.45			.95									.85	T			T.	T.	3.95
Anchorage	O		T			.63			.66	.13					.23	.24	1.53	1.47									1.78	.11				T	[illegible]
Bardstown	S					.95			.65	.20					.10	.10	1.30	2.25									.45	.65				.10	6.75
Bowling Green	G					.94			1.25	.10							.80	2.00	3.00								1.00	.40			.12		[illegible]
Brownsville	G	.11				.83	.06			1.18					.03	.13	.14	5.25	.22									1.62				.02	[illegible]
Burnside	C	.48				.78	.29			.67						.29		.54	.30									.88					4.23
Carrollton ‖	O	.06				.57				.73		.02				.02	.37	1.92	.14									1.62				.05	5.50
Cloverport ‖	O	.12				.70				.80		T.			.02	.15	.16	3.96	.10								.01	.17				T	6.19
Edmonton	G																																
Eubank	C	.23				.60	.35											.10	.30									.76			.71		[illegible]
Frankfort	K	.20				.85	.02			.80		.10			.05		.08	2.30	.14									.92				.01	5.47
Franklin	G					.77			1.15	.11					.82		2.00	2.80													.10		7.75
Greensburg	G			.09		.71			.85	.09					.05		.48	1.33									1.05					.06	4.71
High Bridge	K	.22				.76	.07			.83					.13			1.80	.12									.44					4.37
Irvington	O		T.			.77			.75	.18		T.			T.	.04	1.92	1.85									.42					T.	5.93
Junction City	K					.83	.08		.95	.10					.23		.44	.79									.07				.09		3.58
Lebanon	S																																
Leitchfield	G					.70			.31						*	.21	*	2.95									.90				.03		5.10
Lexington ***	K					.65			.59	.06	T.	.01			.42	.05	1.30	.17	.02								.32	.12			T.	T.	3.71
LOUISVILLE***	O		T			.57			.86	.02	T				.04	.19	2.65	.49									.88	.02			T.	T	5.72
Do (Cherokee Park)	O			.10		.59				.80		.02			.10	.04	.50	3.06										1.05			T		6.26
St. John	S					1.20			.90	.10					.05	.10	2.03	2.50									1.00	.10				T.	7.98
Scott	L					.64			.78	.23					.08	.55	.72	1.51	.09								.60	1.21			T	T.	6.41
Shelbyville	S					.90			.88	.18		.01				.14	1.10	2.40	.05								.60	1.30					7.56
Taylorsville	S					.91			.96	.09	T	.03		T	.13	.10	1.55	1.85									.86	.98			T.	T.	7.46
Williamstown	L					.63			.73	.18					.22	T.	.98	1.70	.04								.17	1.05					5.70
Woodbury	G					.98	T.		T.	1.30					.30	.17	.19	4.23	.09								T.	.52					7.78
Eastern Division.																																	
Beattyville ‖	K	.21				1.05	.34			.64		.01			.24	.08		.27	.11									.62				.10	3.67
Berea	K	.28				.43	.05			.47					.26			.20	.14									.60				T	2.43
Catlettsburg	B	.28				.66	.13			.65						.06			.20	.11								.60	.07			.08	2.84
Cynthiana	L							.20		.95	T.			T	.25	.15	.30	1.40	.15									.60				T	4.00
Falmouth	L	.38				.60	T.			.87					.24		.27	1.70	.25									.87			.03		5.21
Farmers	L					1.00				.80					.85			.08	.05									.55				T	[illegible]
Harlan	K					*	*		.65	.59					.23			.43										1.58			.02	.03	3.53
Jackson	K	.30				.10	.73			.75		T			.25	.10		T.	.53									.86	.03			.15	3.80
London	C	.50			.50		.15			.15					.20	.05		.35	.09									.60				.25	2.84
Louisa ‖	B	.26				.67	.22			.62		.02			.03	.07			.34	.06								.87	.07			.15	3.38
Maysville	O	.17				.62	.10			.77	T	T			.08	.04	.02	.38	.18	T								.20				T.	[illegible]
Middlesboro	C																																
Mount Sterling	L	.03				.90			.64	.31					.40	T.	.11	.32	.05								T.	.57				[illegible]	[illegible]
Pikeville ‖	B	.26				.16	.72			.36		T.			.16	.12			.32									1.52	.22			.70	4.54
Richmond	K																																
Weeksbury	B																																
Williamsburg	C	.10				.95	.32			.56					T	.31			.62									1.42	.10			.15	4.53

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

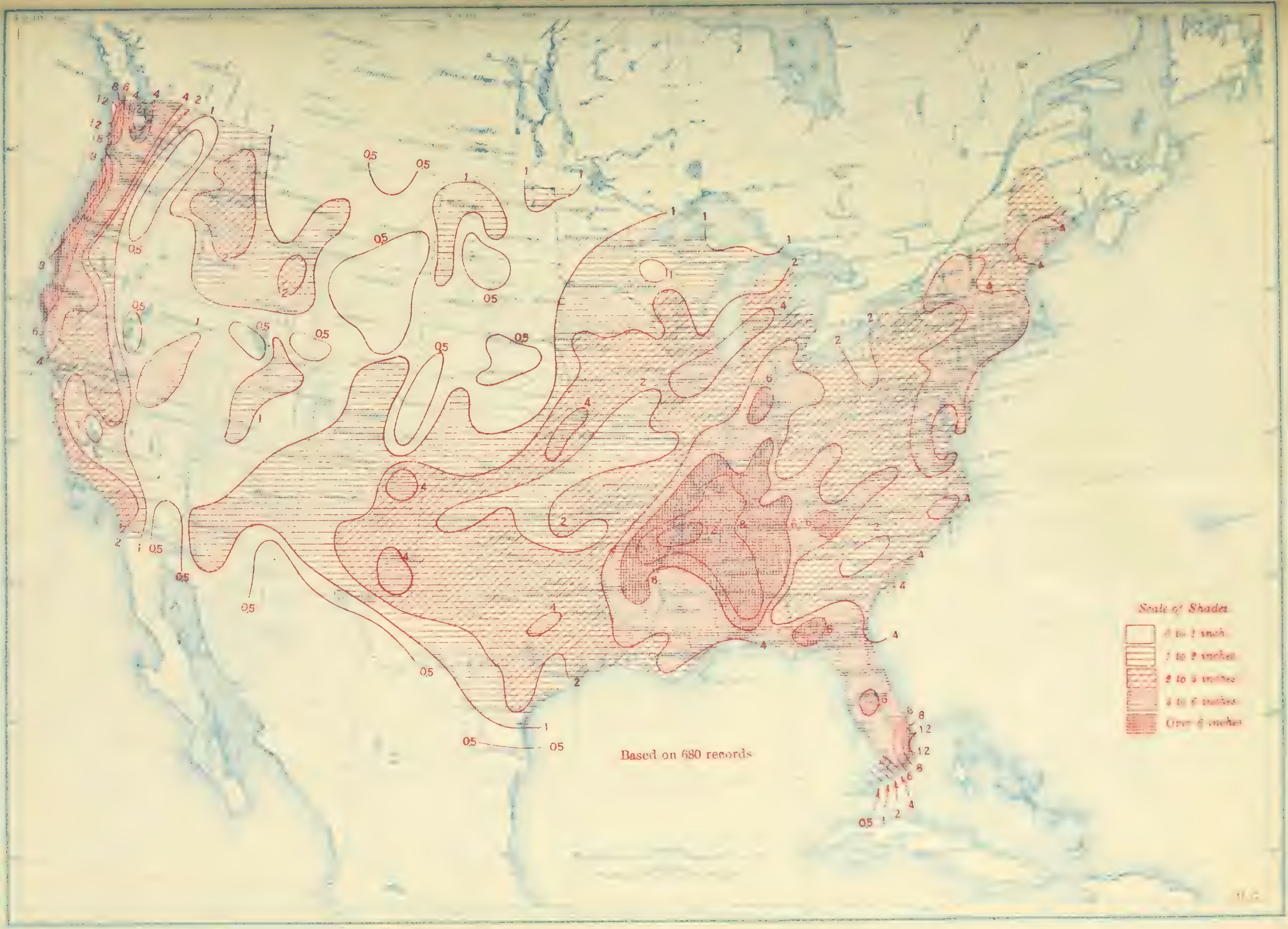
Daily temperatures for March, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	41	53	64	63	72	45	54	50	49	53	53	65	71	68	66	64	66	58	64	72	72	65	62	71	79	69	60	57	60	75	66	62.3
	Minimum	18	24	28	25	32	27	27	33	33	26	34	25	40	50	56	57	54	39	31	31	36	39	31	32	41	55	38	27	28	31	36	35.0
Blandville	Maximum	39	47	60	71	63	45	52	45	52	56	54	59	68	67	67	67	62	57	63	70	64	52	61	70	69	62	50	57	67	70	59	59.5
	Minimum	17	28	31	47	27	24	30	35	34	36	35	35	44	54	59	57	51	39	39	44	47	39	35	39	50	45	35	33	43	53	38	39.5
Calhoun	Maximum	42	46	61	71	69	46	53	49	47	52	53	62	71	65	64	64	64	55	63	72	72	61	62	70	79	66	54	56	67	72	68	61.2
	Minimum	16	25	28	44	30	26	25	35	33	27	33	28	43	50	56	56	52	38	36	37	43	39	32	36	43	53	37	30	35	50	35	37.1
Earlington	Maximum	42	52	65	74	65	48	55	47	48	54	55	66	72	65	67	65	66	57	67	74	73	56	63	74	80	64	49	58	72	75	66	62.4
	Minimum	18	24	27	45	31	29	25	36	34	28	32	27	42	51	57	58	50	39	33	33	36	41	33	32	39	47	39	27	31	46	37	36.4
Greenville	Maximum	41	50	65	73	71	45	51	51	54	52	50	63	73	73	65	66	67	57	64	70	71	64	60	73	79	71	59	56	69	75	65	62.7
	Minimum	16	25	37	46	36	26	27	34	33	27	32	27	40	49	55	57	52	38	34	35	39	39	34	37	40	54	37	27	32	47	36	37.0
Hopkinsville	Maximum	44	52	65	75	67	48	54	48	50	53	56	67	73	64	64	68	65	60	67	76	74	62	65	66	79	71	56	60	70	76	65	63.2
	Minimum	18	26	27	40	31	29	29	36	34	28	35	30	40	33	37	54	55	39	35	35	39	41	31	39	45	54	38	26	33	40	37	35.9
Marion	Maximum	40	44	60	70	69	45	60	55	48	49	51	57	65	65	67	62	57	57	70	62	67	54	60	70	73	64	59	57	67	72	63	60.0
	Minimum	20	17	33	48	29	29	37	30	30	39	39	30	32	47	57	52	36	37	36	44	43	39	32	36	46	52	37	30	42	47	37	37.5
Mayfield §§	Maximum	39	46	61	70	40	45	51	43	52	51	54	61	67	64	66	59	62	58	64	71	69	49	50	69	71	60	52	58	..	..	..	[c]57.2
	Minimum	19	23	28	40	39	27	29	30	34	32	35	30	39	49	55	56	56	38	36	40	42	40	34	46	44	49	36	30	39	28	..	[a]37.4
Owensboro	Maximum	38	45	60	71	61	46	50	42	46	51	49	62	68	64	64	66	66	54	63	64	68	65	62	69	76	69	55	54	65	70	67	59.7
	Minimum	18	26	30	42	31	29	29	36	34	30	34	29	42	42	44	58	50	39	36	39	52	40	35	39	42	53	38	29	34	47	37	37.5
Paducah (Lone Oak)	Maximum	56	46	60	70	66	46	44	48	49	52	60	68	70	68	66	64	63	57	64	66	56	54	54	68	69	65	54	54	62	62	63	59.5
	Minimum	18	28	30	48	28	26	26	28	34	34	34	38	40	44	58	57	54	38	38	39	40	41	36	41	46	49	35	32	43	51	36	38.4
Princeton §§	Maximum	41	47	69	72	46	45	52	45	49	53	52	65	71	63	..	65	65	56	67	71	69	51	61	72	78	68	58	57	71	69	43	[a]59.7
	Minimum	17	26	26	39	38	27	26	37	35	30	34	26	39	53	54	..	56	39	30	34	46	40	36	37	37	54	37	28	40	46	39	[a]36.9
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	42	55	58	70	64	46	45	45	50	54	54	61	67	60	70	67	65	55	60	68	70	52	57	70	75	66	55	51	60	70	37	58.7
	Minimum	23	30	29	53	38	30	36	34	36	30	37	28	52	55	51	61	55	44	32	32	41	40	32	34	38	42	41	32	31	53	36	38.9
Anchorage	Maximum	40	46	61	71	59	38	49	47	52	51	51	61	67	62	62	67	64	52	61	69	69	54	60	63	77	62	57	52	61	71	53	58.4
	Minimum	16	20	27	35	30	23	26	28	30	24	27	23	34	47	57	56	47	38	26	29	33	33	29	31	33	51	37	24	27	39	33	32.7
Bardstown	Maximum	44	58	66	68	69	38	52	52	54	53	53	60	64	65	68	68	66	55	58	65	67	61	60	65	74	62	58	53	64	70	55	60.2
	Minimum	18	23	32	32	31	29	30	30	32	25	25	38	50	50	53	58	53	39	31	32	40	37	30	35	39	53	38	29	30	41	35	36.1
Bowling Green	Maximum	47	53	66	73	64	44	50	51	53	59	55	66	72	70	69	66	68	58	65	74	73	72	73	74	79	69	68	58	68	75	61	64.3
	Minimum	20	26	31	49	32	30	28	32	35	22	38	38	44	46	50	52	54	40	33	36	40	36	34	32	40	40	39	29	33	45	38	36.8
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	52	52	63	70	60	46	43	44	..	54	52	52	65	62	73	69	67	66	58	63	67	61	54	68	76	68	56	59	61	63	54	[a]59.9
	Minimum	18	24	27	35	30	27	31	32	..	25	34	24	41	50	51	61	50	35	27	31	35	34	27	35	36	48	36	26	25	34	32	[a]34.0
Frankfort	Maximum	51	47	57	69	64	36	47	46	58	52	52	58	56	62	69	70	64	59	56	65	66	65	56	62	74	73	50	48	58	70	69	59.3
	Minimum	20	25	29	34	32	29	28	32	41	46	48	45	39	50	27	59	55	41	31	32	37	35	31	35	36	49	38	31	30	40	33	36.7
Franklin	Maximum	42	52	65	72	63	39	47	47	53	54	54	63	70	64	67	66	65	57	61	70	70	63	60	71	78	65	58	55	67	75	60	61.1
	Minimum	18	27	28	44	31	29	28	33	34	30	36	28	47	53	53	58	54	39	32	33	39	39	31	33	45	42	38	27	33	49	37	37.0
Greensburg	Maximum	43	52	72	65	65	32	45	44	55	51	52	62	68	65	70	70	66	55	60	65	69	63	56	69	78	63	49	50	61	72	69	59.9
	Minimum	17	24	24	33	28	28	28	29	34	25	33	24	36	50	53	58	53	36	29	28	33	36	28	28	34	39	40	25	27	35	35	33.2
Irvington	Maximum	38	46	60	69	62	42	48	44	52	52	50	60	67	66	68	65	65	50	58	66	58	49	56	66	75	68	55	52	63	70	52	57.8
	Minimum	16	27	33	46	32	27	27	34	33	29	34	29	45	53	57	58	50	40	33	37	42	37	32	37	42	55	39	30	33	40	34	37.5
Junction City	Maximum	46	49	66	70	70	33	43	46	54	50	48	62	66	63	69	75	64	55	61	63	66	58	54	67	75	71	60	50	59	67	61	59.4
	Minimum	16	21	27	32	31	27	31	27	34	24	32	24	34	48	50	57	53	34	27	39	40	34	26	30	30	49	37	27	25	35	33	33.4
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	38	48	61	69	63	41	49	47	53	52	50	60	69	66	66	64	60	50	57	66	67	60	57	67	75	67	55	51	63	70	50	58.4
	Minimum	17	25	29	40	30	27	26	31	33	26	33	25	39	50	54	56	50	37	30	35	39	37	31	37	39	54	38	26	31	43	34	35.5
Lexington	Maximum	37	44	59	69	56	34	45	50	51	48	46	58	64	58	69	68	62	44	55	60	64	46	52	60	73	65	51	45	62	66	42	54.9
	Minimum	19	26	34	44	28	26	27	32	32	33	34	36	45	52	54	55	44	34	33	38	40	32	29	34	44	51	33	28	36	42	29	36.3
Louisville	Maximum	36	49	58	69	62	39	48	50	50	51	51	59	65	62	67	64	64	51	58	68	68	53	58	64	75	64	47	51	61	71	45	57.4
	Minimum	19	27	36	47	30	28	30	35	34	33	35	34	48	50	55	56	45	38	36	41	42	35	34	38	45	47	36	33	37	45	31	38.1
Do. (Cherokee Park)	Maximum	48	47	59	70	66	38	47	46	50	56	49	61	62	61	60	64	66	48	57	63	59	50	53	60	70	59	44	50	57	65	43	55.7
	Minimum	16	21	28	40	30	24	24	31	32	26	32	25	41	46	52	57	45	39	29	33	39	33	29	32	36	44	36	27	29	43	32	33.9
St. John	Maximum	55	47	60	69	63	39	48	50	52	50	51	60	66	65	66	64	63	57	59	66	68	59	57	65	76	59	55	52	62	71	67	59.4
	Minimum	25	25	31	37	31	28	26	32	34	26	33	25	39	49	53	57	39	34	30	34	40	36	31	36	28	45	37	28	31	55	32	35.4
Scott	Maximum	39	46	59	69	62	38	48	41	50	48	49	59	63	61	66	64	60	55	58	63	61	48	49	62	73	64	57	47	60	67	51	56.0
	Minimum	17	21	29	40	20	24	24	31	33	27	31	27	40	41	52	56	50	36	28	33	39	31	28	31	37	54	34	27	28	39	30	33.5
Shelbyville	Maximum	41	49	61	70	65	37	47	47	52	49	52	61	67	63	69	66	64	55	56	66	68	62	59	65	70	69	58	47	60	70	64	59.0
	Minimum	16	23	27	37	30	26	25	30	32	25	32	24	38	47	51	56	48	37	27	31	34	32	27	31	37	52	35	25	27	40	30	33.3
Taylorsville	Maximum	37	46	58	69	64	35	46	44	43	51	48	59	67	62	68	67	65	53	55	64	66	57	55	62	75	65	58	49	57	70	62	57.3
	Minimum	18	23	26	31	31	28	27	29	34	26	27	25	34	47	52	57	52	39	29	29	33	35	31	31	35	48	38	28	28	39	34	33.7
Williamstown	Maximum	53	46	62	69	61	48	51	40	51	49	50	60	68	57	67	66	64	50	60	68	67	64	58	64	77	74	57	48	61	69	62	59.4
	Minimum	18	21	33	44	30	26	24	31	33	23	31	33	44	43	52	57	51	38	30	35	40	31	28	32	40	57	35	27	30	42	30	35.1
Eastern Division.																																	
Beattyville	Maximum	60	54	66	76	71	35	50	47	53	55	54	68	71	65	70	70	68	66	62	70	73	69	63	69	81	67	47	51	65	73	70	63.2
	Minimum	22	21	25	27	34	29	32	27	36	26	36	21	30	47	44	44	56	35	29	29	29	38	24	26	29	44	38	29	23	30	34	32.1
Berea	Maximum	50	55	69	73	53	37	48	51	42	43	60	64	68	64	72	74	64	53	60	68	69	48	55	69	76	69	48	47	65	69	..	[a]59.4
	Minimum	20	22	27	40	50	27	29	32	35	27	31	30	38	50	53	52	57	38	28	30	37	35	28	30	41	58	39	29	28	39	35	36.0
Farmers	Maximum	60	53	61	65	67	37	53	48	51	54	53	64	69	63	64	62	65	59	60	68	70	65	60	65	70	68	67	48	60	70	56	60.5
	Minimum	22	22	26	40	24	23	26	27	34	24	35	21	29	42	52	42	55	36	45	25	32	35	22	26	29	41	35	27	21	28	30	31.5
Hazard	Maximum	54	66	67	70	..	..	..	59	55	53	53	65	67	61	73	73	69	57	59	69	70	63	60	76	76	67	65	50	59	68	63	[c]63.8
	Minimum	27	29	39	31	..	..	..	32	37	30	38	26	32	46	52	59	46	40	30	30	38	41	30	29	32	45	39	30	28	32	32	[c]35.7
Maysville	Maximum	35	47	58	71	62	38	45	42	49	49	49	60	64	65	69	69	66	58	58	63	66	50	55	60	72	70	57	48	57	70	60	57.5
	Minimum	21	21	29	32	31	27	25	30	36	27	33	22	32	41	53	55	54	40	29	30	39	34	30	30	30	47	37	30	25	33	32	33.4
Mount Sterling	Maximum	41	49	60	71	57	36	49	43	50	57	48	60	67	57	73	73	63	50	55	61	64	53	53	63	77	66	55	46	56	69	37	56.8
	Minimum	20	24	28	34	30	26	26	29	34	24	34	26	37	47	51	57	50	37	34	28	40	32	27	32	39	48	35	27	26	37	30	33.8
Richmond	Maximum	40	51	62	72	65	35	46	43	52	48	52	63	67	63	70	73	66	56	60	65	70	59	58	68	77	73	58	51	60	69	64	59.9
	Minimum	18	23	29	41	30	27	29	29	33	32	28	28	44	50	50	58	51	38	29	38	40	34	25	31	40	55	36	27	28	41	31	35.3
Weeksbury	Maximum					..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum					..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	63	48	65	73	66	36	46	49	44	56	55	65	68	62	75	72	68	63	60	67	73	66	64	73	73	74	63	66	61	71	48	62.4
	Minimum	24	26	27	30	34	31	34	36	35	30	30	25	35	45	42	58	45	30	29	33	36	40	30	28	33	42	38	30	27	34	34	32.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, inches, March, 1918.



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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

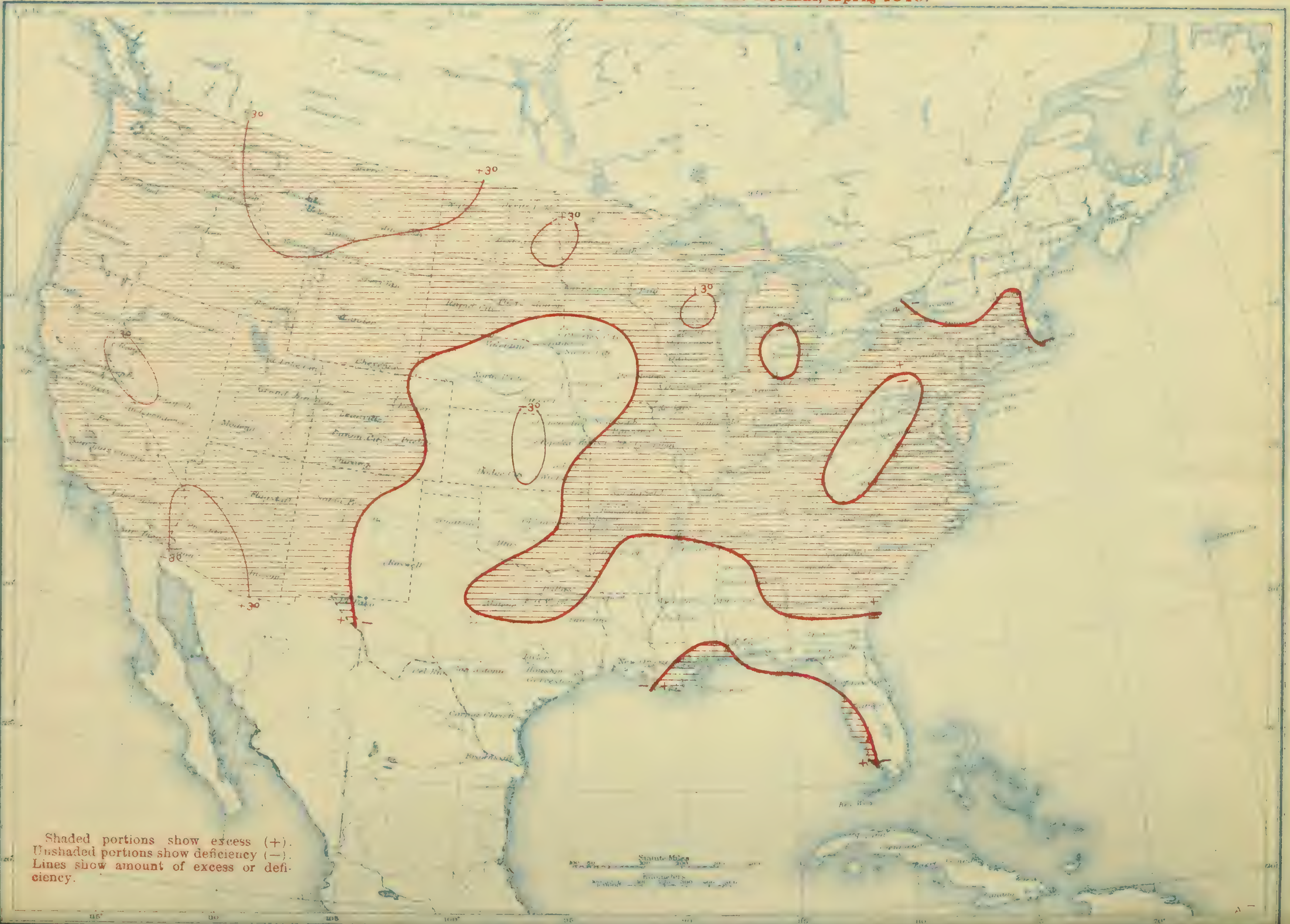
KENTUCKY SECTION

APRIL, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 26, 1919.

Departure of the Mean Temperature from the Normal, April, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., APRIL, 1919. No. 4

GENERAL SUMMARY.

April weather conditions were generally favorable during the first three weeks. Vegetation, already advanced for the season, made good growth. Fruit trees had an unusually heavy bloom, and the outlook for large yields was never better. During the last week freezing temperatures and killing frosts occurred generally over the State, except in a few of the extreme western counties, causing great damage to fruit, and injuring to some extent wheat, clover, and alfalfa. Grape vines were also seriously injured. It is interesting to note that killing frost as late as this one may reasonably be expected in most parts of Kentucky about one year in ten*; but the exceptionally heavy damage from this frost was due in a large measure to the advanced condition of vegetation,—following a warm winter—and to the extremely low temperatures, ranging from 3° to 10° below freezing in the central and eastern counties. Tobacco plant beds, protected by canvas, were not seriously injured.

Rainfall was about normal in amount and well distributed through the month. It occurred principally in light to moderate showers, and except for a few days, interfered but little with farm work.

PRESSURE.

High pressure areas dominated weather conditions over this section during the 1st-5th, 13th, 17th-21st, and the 23d-27th. The "high" of the latter period was one of unusual strength and moved slowly from western Canada southeastward to the south Atlantic coast. It was attended by unseasonably cold weather, bringing killing frost and freezing temperature generally over this State on several mornings.

The principal low pressure areas directly affecting weather conditions over this section were as follows: (1) During the 8-11th a "low" of marked energy moved from western Texas to the Lake region, attended by rains generally over the Middle States. (2) A deep "low" moved from Kansas eastward across the central Mississippi and Ohio valleys during the 14-15th; it turned north to the Lake region on the 16th, and remained over that region until the morning of the 17th, after which it moved off across the north Atlantic states. It was attended by rains generally over this section. (3) A "low" moving eastward from the central Mississippi Valley to the north Atlantic states the 23d-24th caused moderate rains over this section. (4) A shallow "low" attended by showers drifted slowly northeastward across the central Mississippi and Ohio valleys during the 28-30th.

The mean sea-level pressure, based on the records of two stations, was 30.06 inches. The extremes were 30.43 inches on the 25th at Louisville, and 29.51 inches on the 16th at Lexington.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 56.7°, which is 0.8° above normal. The coldest days were the 1st, 2d, 25-27th, when minimum temperatures were near or below freezing generally over the State, ranging between 22° and 35° on the 26th. The extremes were 89° at Earlington on the 23d and 19° at Beattyville and Farmers on the 1st and 2d.

PRECIPITATION.

Precipitation for the State, based on the reports of 52 stations, averaged 3.51 inches, which is 0.43 inch less than normal. In the eastern counties monthly amounts were generally less than 3.00 inches; but over the central and western counties amounts were from 3.00 to 5.50 inches. At the various stations they ranged between 1.48 inches at Eubank and 5.55 inches at Calhoun. Rain occurred generally in the periods 8-11th; 16th; 22d-24th, and 28-30th. Rains were heavy in many localities on the 10th.

WIND.

The total wind movement at Louisville was 9,207 miles and at Lexington 10,059 miles, with average hourly velocities of 12.8 and 14.0 miles, respectively. The maximum velocity for five minutes was at the rate of 44 miles per hour from the south at Louisville, and 42 miles from the southwest at Lexington, on the 10th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 70 per cent, at 12 noon 53 per cent, and at 7 p. m. 59 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 56 and at Lexington 48.

MISCELLANEOUS.

April 9.—Prof. Chas. D. Lewis, cooperative observer at Berea, Ky., sends the following account of a meteor that passed over the upper Cumberland district on the 9th. "The sound of the meteor occurred at about 12.20 p. m., and was like a long, heavy roll of distant thunder. It lasted about 4 to 5 seconds, consisted of heavy jarring reports that shook the house and made the windows rattle markedly. To a person looking from a west window who saw the meteor pass, it appeared like a ball of fire in the sky, and passed rapidly across the field of vision, moving nearly south." The sound of the meteor was heard at Jamestown, Somerset, Danville, Liberty, and other places in that district.

April 22.—A barn was burned and horse killed by lightning in Green County.

April 27.—A beautiful colored halo was observed at La Grange, Ky.

Rivers.—Good stages prevailed in the Ohio and tributary streams during the month.

COMPARATIVE DATA FOR APRIL.

Year.	Temperature				Precipitation.		
	Monthly average	Departure from 30 year normal	Highest	Lowest	Monthly average	Departure from 30 year normal	No. of days with .01 in or more
1889	57.0	+ 1.1	89	24	1.61	−2.33	
1890	57.0	+ 1.1	92	28	4.04	+0.10	
1891	58.0	+ 2.1	92	24	2.52	−1.42	
1892	56.0	+ 0.1	88	22	7.12	+3.18	
1893	58.0	+ 2.1	94	21	6.99	+3.05	
1894	56.0	+ 0.1	94	23	3.54	−0.40	
1895	57.2	+ 1.3	94	22	3.18	−0.76	9
1896	63.6	+ 7.7	96	24	1.65	−2.29	6
1897	55.5	− 0.4	90	25	6.03	+2.09	11
1898	52.4	− 3.5	86	19	3.38	−0.56	9
1899	57.2	+ 1.3	96	20	3.16	−0.78	9
1900	56.2	+ 0.3	90	15	2.15	−1.79	8
1901	50.9	− 5.0	91	23	4.01	+0.07	10
1902	54.2	− 1.7	93	22	2.65	−1.29	9
1903	55.4	− 0.5	90	22	4.43	+0.49	12
1904	50.8	− 5.1	85	16	2.83	−1.11	11
1905	56.7	+ 0.8	91	23	3.00	−0.94	9
1906	59.5	+ 3.6	94	23	1.40	−2.54	6
1907	48.2	− 7.7	87	19	2.78	−1.16	11
1908	59.8	+ 3.9	89	23	6.56	+2.62	14
1909	56.1	+ 0.2	96	21	5.98	+2.04	10
1910	55.4	− 0.5	88	23	5.14	+1.20	14
1911	53.8	− 2.1	90	20	7.06	+3.12	14
1912	58.4	+ 2.5	87	25	7.90	+3.96	12
1913	55.3	− 0.6	89	27	2.73	−1.21	10
1914	55.7	− 0.2	91	13	3.62	−0.32	10
1915	60.1	+ 4.2	96	17	0.96	−2.98	5
1916	54.0	− 1.9	89	23	2.64	−1.30	9
1917	55.8	− 0.1	90	19	5.02	+1.08	8
1918	53.9	− 2.0	87	25	4.07	+0.13	12
1919	56.7	+ 0.8	89	19	3.51	−0.43	10

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*See Cir. No. 19 Kentucky Agricultural Experiment Station on Killing Frosts and Length of the Growing Season in Various Sections of Kentucky; also Monthly Weather Review, July, 1917.

Climatological data for April, 1919.

Stations	Counties			Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.					
		Elevation, feet	Length of record, years	Mean.	Departure from the normal	Highest.	Date.	Lowest.	Date.	Greatest daily range	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	16	58.2	+ 2.8	85	23	25	1†	37	3.40	−0.71	1.11	0	9	15	8	7	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	58.6	+ 1.4	83	23	27	1	26	4.42	−0.11	1.71	0	12	9	9	12	sw.	E. W. Horr.
Calhoun	McLean	437	15	58.2	− 0.7	84	22	24	1	33	5.55	+1.07	1.65	0	9	12	9	9	e.	W. A. Taylor.
Earlington	Hopkins	420	28	60.8	+ 3.6	89	23	27	2	41	3.80	−0.52	1.04	0	8	18	0	12	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	58.2	......	85	23	25	1†	43	4.65	......	1.50	0	10	12	13	5	w.	C. R. Lovell.
Henderson	Henderson	327	11							.....	3.25	−0.18	1.00	0	8	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	22	59.4	+ 2.6	86	8†	25	2	37	4.78	+0.43	1.93	0	10	7	9	14	s.	W. E. Graves.
Marion	Crittenden	571	20	57.1	− 0.2	80	6†	25	1	34	3.40	−1.18	1.03	0	7	16	6	8	w.	B. C. Paris.
Mayfield	Graves	364	9	^{a}58.4	+ 1.2	83^{a}	23	33^{b}	26	31^{b}	3.64	+0.50	1.10	0	6	8^{a}	11^{a}	10^{a}	s.	J. N. Davis.
Owensboro	Daviess	479	22	57.4	+ 2.2	82	23	26	1	31	3.22	−0.88	1.08	T.	12	8	11	11	s.	Henry S. Berry.
Paducah (near)	McCracken	341	19	60.1	+ 0.8	85	22†	28	1	38	4.47	+0.10	1.19	0	10	20	0	10	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{a}58.8	+ 0.6	85	22	25	2	39	4.68	+1.11	1.61	0	7	15	0	15	s.	Ray Baker.
Russellville	Logan	590	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	25	57.8	+ 0.5	83	9	27	2	31	2.97	−2.30	0.70	0	6	14	8	8	s.	W. W. Hicks.
Anchorage	Jefferson	700	18	54.0	+ 0.6	84	9	21	2	39	3.95	−0.03	0.95	0	9	20	2	8	sw.	C. E. Barret.
Bardstown	Nelson	637	22	56.4	− 1.1	86	9	25	1†	40	3.78	−0.09	0.63	0	11	16	5	9	s.	Chas. M. Talbott.
Bowling Green	Warren	500	28	59.6	+ 1.5	88	14	27	1	45	4.38	+0.12	1.30	0	9	18	5	7	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	.....	.....	.....	.....	.....	.....	.....	4.26	......	1.45	0	10	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	26	.....	.....	.....	.....	.....	.....	.....	3.42	−0.53	0.93	0	8	.....	.....	.....	.....	F. E. Bradshaw.
Carrollton	Carroll	492	20	.....	.....	.....	.....	.....	.....	.....	4.69	+1.51	1.25	0	14	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	5	.....	.....	.....	.....	.....	.....	.....	3.34	......	0.85	0	12	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. W. Ray.
Eubank	Pulaski	1177	24	55.8	+ 2.0	85	9	22	2	40	1.48	−2.57	0.39	0	6	6	13	11	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	55.8	+ 0.7	84	9†	26	1	39	3.25	−0.48	0.57	0	13	13	4	13	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	59.2	+ 0.1	85	14†	25	1	35	4.12	−0.49	1.87	0	8	14	8	8	s.	V. P. Atkinson.
Greensburg	Green	581	26	56.4	+ 1.4	87	8	24	1†	40	3.11	−0.74	0.82	0	10	6	7	17	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	.....	.....	.....	.....	.....	.....	.....	3.14	−0.55	0.88	0	11	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	21	57.0	+ 1.5	82	9†	25	1	32	3.20	−0.82	1.11	T.	9	15	1	14	sw.	W. J. Piggott.
Lebanon	Marion	754	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Junction City	Boyle	985	25	55.2	0.7	82	14†	24	1†	45	3.58	−0.13	0.80	0	8	17	4	9	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	23	56.2	+ 0.8	84	23	24	1	34	5.09	+1.01	1.56	0	9	11	12	7	sw.	John E. Stone.
Lexington	Fayette	989	31	54.3	+ 0.6	84	9	24	1	32	3.51	+0.17	1.39	0	14	9	8	13	sw.	U. S. Weather Bureau.
Louisville	Jefferson	525	46	56.6	+ 0.4	84	9	25	1	34	3.15	−0.92	0.82	0	11	11	5	14	s.	U. S. Weather Bureau.
Do. Cherokee Park	Do.	534	9	53.8	− 2.1	79	9	23	1	31	4.00	−0.28	0.99	0	13	12	9	9	s.	Wm. I. Hunt.
St. John	Hardin	777	22	55.8	+ 1.4	85	23	24	1	40	4.44	+0.57	1.16	0	12	17	5	8	......	Sisters of Loretto.
Scott ¶	Kenton	900	21	53.4	+ 0.3	82	9	24	1†	35	3.42	+0.24	0.99	T.	13	6	14	10	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	54.6	− 0.1	84	9	23	1†	37	2.37	−1.35	0.56	0	11	10	11	9	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	54.7	+ 0.3	84	9	25	1†	37	4.09	−0.38	1.33	0	12	13	5	12	sw.	E. D. Bourne.
Williamstown	Grant	943	16	55.6	+ 3.3	88	23	24	1†	36	2.50	−0.60	1.02	T.	12	14	6	10	......	Miss Rose Carter.
Woodbury	Butler	533	1	.....	.....	.....	.....	.....	.....	.....	4.86	......	1.58	0	10	.....	.....	.....	.....	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	55.4	+ 1.5	86	9	19	1†	50	2.67	−1.60	0.71	0	11	12	9	9	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	56.4	+ 0.8	87	9	24	1†	40	2.04	−1.57	0.45	0	11	13	6	11	sw.	Prof. Chas. D. Lewis.
Catlettsburg ‡	Boyd	531	30	.....	.....	.....	.....	.....	.....	.....	2.84	−0.69	0.51	0	9	.....	.....	.....	.....	Forester Farley.
Cynthiana	Harrison	684	1	.....	.....	.....	.....	.....	.....	.....	3.52	......	1.50	0	8	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	30	.....	.....	.....	.....	.....	.....	.....	2.93	−0.54	1.13	0	9	13	7	10	se.	J. V. Oldham.
Farmers	Rowan	668	11	54.8	+ 0.4	87	9	19	1†	43	2.82	−1.18	0.60	0	10	15	12	3	w.	Mrs. Gertrude Thompson.
Harlan	Harlan	1197	1	^{c}58.0	.....	87^{c}	9	24^{c}	2	45^{c}	2.44	......	0.98	0	7	14	6	10	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	.....	.....	.....	.....	.....	.....	.....	2.21	−1.31	0.90	0	7	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	4	.....	.....	.....	.....	.....	.....	.....	3.32	......	0.92	0	9	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	15	.....	.....	.....	.....	.....	.....	.....	2.84	−0.38	0.83	0	12	.....	.....	.....	.....	Miss Carrie S. Adams.
Maysville	Mason	524	21	55.8	+ 2.2	84	9	22	2	40	2.73	−0.70	1.06	0	10	14	7	9	w.	J. C. Armstrong.
Middlesboro	Bell	1128	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	29	55.1	+ 1.5	86	9	24	1	42	3.58	−0.34	1.55	0	13	14	1	15	w.	W. R. McKee.
Pikeville	Pike	634	13	.....	.....	.....	.....	.....	.....	.....	3.27	−0.34	1.07	0	10	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	24	56.2	+ 0.7	88	9	21	1	36	2.96	−0.65	1.20	0	9	16	4	10	......	J. W. Crooke.
Weeksbury	Floyd	1216	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. V. Johnson.
Williamsburg	Whitley	939	21	56.9	+ 1.2	88	9	24	2	47	3.82	−0.58	1.24	0	7	13	4	13	w.	N. C. Jones.
State averages and extremes				56.7	...	89	23	19	1†	50	3.51	......	1.93	T.	10	13	7	10	w.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡ Post office address, Normal, Ky. ‡‡ Nerinx, Ky. ¶ Covington, Ky.

Daily Precipitation for April, 1919.

Stations		Day of month																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Western Division.																																
Beaver Dam	G				.09				.60	.64	1.11	.06					.79						[illegible]							[illegible]	[illegible]	[illegible]
Bandville	M			.02	.18				.50	.13	.02		[illegible]	.02		.01	.77							[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]
Calhoun	G			T					1.65	.05	.92				[illegible]	.21	1.60	[illegible]					[illegible]	[illegible]						[illegible]	[illegible]	[illegible]
Earlington	G				.10				.25		1.04	[illegible]					.99						.30		[illegible]					[illegible]	[illegible]	[illegible]
Greenville	G				.20				.40		1.50				.47	.85							.35	.25					[illegible]	[illegible]	[illegible]	[illegible]
Henderson	O			T					.18		.74				.06	T.	1.00	T					.28						[illegible]	[illegible]	[illegible]	[illegible]
Hopkinsville	C				.19				.73	T	1.93	.48			.06		1.21							.01	T				.04	.07	.06	[illegible]
Marion	O				T				1.03	T	.46					T.	.70	T					[illegible]	[illegible]				T	.32	.50		3.40
Mayfield	M				.50				.42		.65						1.10								.55					.42		3.64
Owensboro ‖	O	T.		T	.04	.01			.16	.02	[illegible]	T			.07		1.08	T	T.				.16	.09	T				.03	.92	.12	[illegible]
Paducah (near)	O				.15				.30	.06	.72					.32	.15						T	.01					[illegible]	[illegible]	[illegible]	[illegible]
Princeton	G				.02				.06		1.61						1.41						.16							[illegible]	[illegible]	4.68
Russellville‡‖	G																															
Central Division.																																
Alpha	C				.25				T		.70					.65	T.						.25						[illegible]	[illegible]		2.97
Anchorage	O								.46		.94				.07	.65	.67	.01					T	T					[illegible]	[illegible]	[illegible]	[illegible]
Bardstown ‖	S					.07			.63	.27	.50	.60					.40					.03		.06			[illegible]			.40	[illegible]	[illegible]
Bowling Green	G				.12				.05	.53	1.30	.10					.65							.18	T					1.00	.25	[illegible]
Brownsville ‖	G				.19				.47	.03	1.45	.32			.03		.91							.21						.42	[illegible]	[illegible]
Burnside ‖	C				.08	.12	T			.10		.91					.52					T		.40					T	[illegible]	[illegible]	[illegible]
Carrollton ‖	O			.02		T			.02	.13	.60	.27			.01		1.15	.02	.05			.17		[illegible]	1.25				T	[illegible]	.92	4.69
Cloverport ‖	O	T.			.05	.02			.51	.08	.68	.15					.64		.09				.11	.01	T.				T	[illegible]	.15	[illegible]
Edmonton	G																															
Eubank ‖	C				.05	.10				.30							.28													[illegible]	[illegible]	1.48
Frankfort	K					T.			.45	.30	.28	.61			.06		.57	T	.08			.17		.15	.01				[illegible]	.17	.32	3.25
Franklin	G								.32		1.87					.30	.31							.24					.22	.24	.52	4.12
Greensburg ‖	G				.05				.05	.50	.13	.82			.02		.47							.19						[illegible]	.30	3.11
High Bridge ‖	K									.54	.05	.88			.09		.48					.07		.21	.03				[illegible]	.29	.46	[illegible]
Irvington	O				.17				.47		1.11					.19	.43	T					.10	T.					[illegible]	[illegible]	.08	3.20
Junction City	K				.12				.52		.80					.62		.78											[illegible]	[illegible]	[illegible]	[illegible]
Lebanon	S																															
Leitchfield	G				.06				.92		1.56					.72	.43						.52						.51	.46	.11	5.09
Lexington ***	K				T.				.53		1.39			.04	.02	.31	.21	.02			.05	.15	.13	.04					.23	.02	.37	3.51
LOUISVILLE***	O			T	.02				.49		.78			.06		.42	.40	T			T		.02	.02					.06	.35	.53	[illegible]
Do. (Cherokee Park)	O			T.	.03				.48		.99				.12	.68	.85	.03	.04				.03	.10					.15	.23	.27	[illegible]
St. John	S				.08	.02			.90	.12	.89	.26			.01		1.16						.22	.03	T				T	.40	.54	[illegible]
Scott	L			.05					.49		.99					.16	.43	.21			.04	.06	.13	.20				T	.04	.04	[illegible]	3.42
Shelbyville ‖	S					T.			.05	.35	.37	.53			.06		.56		T			.12		.07	.06				.05	.15		2.37
Taylorsville	S								1.33		1.08				.04	.33	.33	.01	T			.02	.04	.03				T	.31	.21	.33	4.09
Williamstown ‖	L			.04					.25		1.02					.03	.42	.02	.03			T	.08		.26				[illegible]	.03	.30	2.50
Woodbury ‖	G				.12				.70	T.	1.58	.10			.01		1.72		T				.11	.12						.24	.16	4.86
Eastern Division.																																
Beattyville‖	K				T	.13				.32		.50			.07		.71	.05				.09		.25	.18				T	.18	.19	[illegible]
Berea	K				.10				.45		T.	.12			.04	.03	.24					.07	.15						.25	.18	.41	[illegible]
Catlettsburg ‖	B									.15		.51					.48	.08	.05					.47	[illegible]					.45	.15	2.84
Cynthiana ‖	L				T.	T.			T.	.25	T	1.50			T.		.35	T.				.10		.15	.85				T	.12	.20	[illegible]
Falmouth	L	T.							T.	.28	.27	1.13					.53		.08			.05			.30					[illegible]	.25	2.93
Farmers	L					T			.50		.05	.60					.52					.05	.25	.45				.10	T.	.25	.05	2.82
Harlan	K				*	.08			.01			.98					.28						.15							.71	.23	2.44
Jackson‖	K					.11				.20		.90			T.		.50		T.			T.		.33	.12				T.	[illegible]	T	2.21
London ‖	C	.09			.35	.05				.18		.70					.80							.05						.18	.92	[illegible]
Louisa ‖	B	T.				.07			T.	.25		.83			.02		.42	.02	.03					.34	.35			.06		[illegible]	.19	2.84
Maysville‡‖	O									.25		1.06					.49		.15			.02		.16	.40				.05	[illegible]	.10	2.73
Middlesboro	C																															
Mount Sterling	L	.02				.07			T.	.63		1.55			T.		.32	.02	.04			.05		.30	.06				.10	.28	.14	3.58
Pikeville	B											1.07	.06		T.		.40	.12				.14		.56	.15				.14	.37	.26	3.27
Richmond ‖	K					.07				.36		1.20					.28					.15		.13	.30			T.		.16	[illegible]	2.96
Weeksbury	B																															
Williamsburg ‖	C				T.	.12				.15		.90		T.			.68	T.						.32						.41	1.24	3.82

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

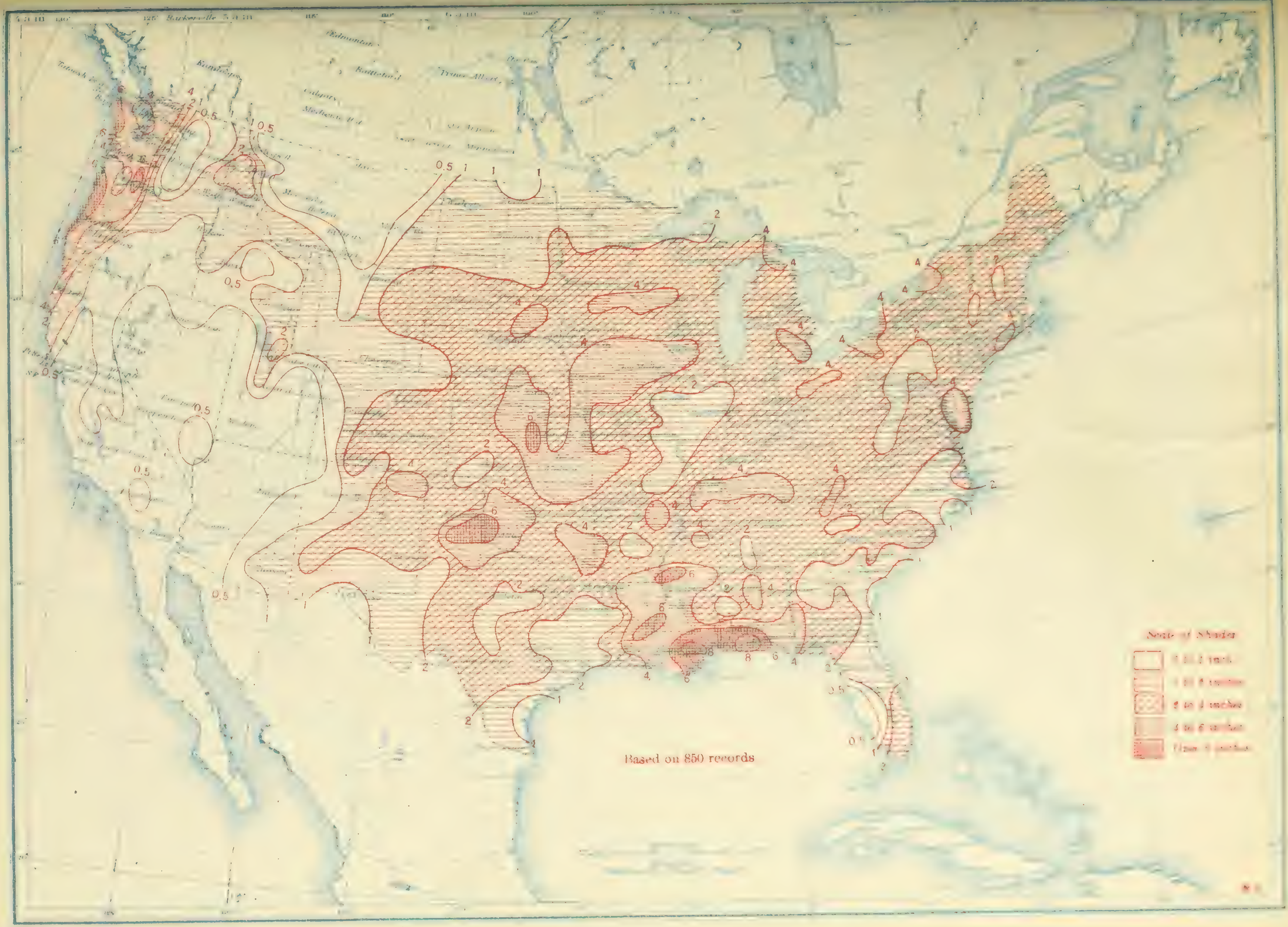
Daily temperatures for April, 1919.

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	49	61	70	67	67	73	72	79	83	80	64	72	72	83	78	64	54	59	72	79	78	84	85	79	56	62	70	71	67	68	..	70.6
	Minimum	25	25	39	48	38	50	50	60	59	61	41	42	41	53	65	47	37	35	35	52	54	54	57	52	33	26	33	51	51	60	..	45.8
Blandville	Maximum	48	57	67	64	71	76	75	75	77	67	62	70	69	79	72	57	56	64	69	75	78	81	83	69	51	59	58	70	68	66	..	67.8
	Minimum	27	33	46	49	47	57	60	60	64	50	47	44	51	55	57	43	41	39	46	53	54	60	62	51	36	33	43	55	58	57	..	49.3
Calhoun	Maximum	49	58	64	64	71	80	79	76	80	75	63	68	71	81	77	65	60	66	69	76	77	84	83	75	54	62	63	67	63	66	..	69.5
	Minimum	24	29	43	48	42	52	60	58	60	59	43	43	43	52	58	40	38	42	41	53	55	54	58	49	32	29	35	52	55	58	..	46.8
Earlington	Maximum	51	66	72	70	76	84	84	81	85	80	66	74	77	86	83	68	54	71	78	80	80	86	89	69	55	64	66	72	71	68	..	73.5
	Minimum	28	27	43	49	41	56	62	61	58	62	45	42	43	54	66	48	39	35	37	52	53	58	59	54	34	28	34	56	58	60	..	48.1
Greenville	Maximum	49	60	69	64	81	82	79	82	84	79	74	72	74	84	65	62	52	67	71	79	80	84	85	70	55	62	64	76	71	68	..	71.5
	Minimum	25	25	40	47	38	41	60	60	57	58	42	40	44	53	43	41	36	36	37	54	54	55	57	49	32	27	33	52	56	58	..	45.0
Hopkinsville	Maximum	54	62	72	65	75	85	82	86	82	73	66	76	74	85	77	65	55	68	75	80	84	85	86	78	56	65	64	69	71	69	..	72.8
	Minimum	26	25	41	48	38	51	67	60	61	58	39	42	49	51	58	43	36	33	38	46	51	58	55	56	35	28	35	39	59	58	..	46.1
Marion	Maximum	47	60	65	64	59	80	79	75	72	73	60	66	70	76	76	61	51	65	71	75	75	80	80	72	58	60	58	67	67	64	..	67.5
	Minimum	25	30	47	48	48	46	60	59	51	57	45	44	44	54	57	42	38	39	37	55	53	55	53	48	34	30	35	55	55	57	..	46.7
Mayfield §§	Maximum	..	69	62	62	71	82	63	64	76	59	62	73	70	79	65	46	55	65	69	75	81	81	83	64	48	61	59	75	71	63	..	a67.3
	Minimum	..	..	43	49	44	56	58	62	61	59	43	42	45	53	59	46	39	37	43	52	53	61	61	52	36	33	36	47	58	56	..	b49.4
Owensboro	Maximum	46	58	64	64	70	79	78	75	81	73	63	65	69	81	74	61	50	63	69	75	75	80	82	72	52	60	63	61	62	66	..	67.7
	Minimum	26	30	43	48	52	52	58	60	60	55	44	43	41	52	61	42	39	37	44	51	56	59	59	47	32	29	36	45	55	57	..	47.1
Paducah (Lone Oak)	Maximum	50	61	62	63	66	75	75	75	75	71	63	66	74	79	80	81	64	69	72	79	81	85	85	80	63	60	61	73	76	71	..	71.2
	Minimum	28	32	45	48	50	47	60	60	63	54	46	45	58	54	54	43	39	39	40	54	52	60	63	52	36	35	42	55	58	58	..	49.0
Princeton §§	Maximum	48	62	71	64	76	83	82	82	83	83	64	..	73	83	66	52	54	68	75	79	82	85	84	60	55	63	63	76	68	66	..	a70.7
	Minimum	26	25	44	48	37	56	55	61	61	60	44	40	..	50	52	46	41	32	38	54	53	59	57	55	34	28	36	56	57	59	..	a47.0
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	45	54	63	52	67	76	75	80	83	70	65	70	70	81	76	60	52	60	66	72	75	75	78	75	56	60	66	76	60	68	..	67.5
	Minimum	28	27	37	49	36	49	66	64	57	60	46	43	50	53	56	52	40	40	36	49	58	54	63	50	34	34	36	62	57	59	..	48.2
Anchorage	Maximum	47	47	60	61	70	80	80	76	84	76	59	67	68	80	73	59	47	61	67	77	69	69	83	67	53	61	66	66	57	66	..	66.5
	Minimum	22	21	37	43	40	43	51	56	57	54	40	38	34	47	55	38	37	31	34	47	53	43	51	38	26	22	30	50	51	53	..	41.4
Bardstown	Maximum	46	57	66	59	70	81	79	79	86	81	61	70	69	82	78	60	50	61	70	77	71	72	84	59	55	62	68	72	60	67	..	68.4
	Minimum	25	25	35	49	38	41	60	59	60	61	43	44	41	43	60	42	39	34	35	49	55	48	55	50	28	25	31	54	52	53	..	44.5
Bowling Green	Maximum	50	62	68	70	75	83	81	84	84	80	71	76	75	88	83	61	54	68	74	81	81	85	86	84	62	65	70	76	69	70	..	73.9
	Minimum	27	29	29	38	37	38	60	42	58	61	40	45	45	50	60	47	38	38	39	47	54	55	57	57	33	29	34	53	57	59	..	45.2
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	43	56	65	62	66	79	77	81	85	80	65	76	68	81	77	59	47	57	70	75	74	69	81	71	55	59	69	71	61	67	..	68.2
	Minimum	24	22	32	45	33	42	57	56	58	60	43	43	42	57	57	45	36	32	33	47	55	46	51	43	27	23	29	55	55	56	..	43.5
Frankfort	Maximum	44	54	62	62	68	79	78	77	84	84	65	67	66	73	77	61	48	58	66	76	75	69	82	72	49	57	68	69	60	68	..	67.3
	Minimum	26	27	34	49	44	40	53	55	55	62	46	44	40	51	54	47	41	36	35	46	54	46	53	47	29	29	32	51	53	54	..	44.4
Franklin	Maximum	48	59	69	66	70	80	79	82	83	76	65	74	71	85	73	59	57	63	70	78	81	84	85	66	55	60	70	80	72	69	..	70.8
	Minimum	25	28	41	48	41	52	61	60	61	59	40	48	49	52	58	44	38	36	40	52	55	57	62	55	33	27	35	55	56	59	..	47.6
Greensburg	Maximum	40	57	67	66	70	80	78	87	82	81	62	71	68	74	76	69	49	60	69	75	74	77	81	78	54	60	68	78	65	70	..	69.5
	Minimum	24	26	30	46	35	42	57	55	54	59	41	41	41	50	57	44	38	32	32	42	54	47	51	52	28	24	28	53	55	58	..	43.2
Irvington	Maximum	46	57	64	61	70	78	78	76	82	75	63	67	67	80	72	61	50	61	66	76	72	78	82	75	52	60	67	67	61	67	..	67.7
	Minimum	25	30	42	49	43	54	61	60	61	61	42	45	44	52	61	41	38	38	46	50	52	53	56	44	29	28	37	53	41	56	..	46.4
Junction City	Maximum	43	55	73	60	68	78	79	77	77	72	61	68	67	82	77	68	47	58	72	76	75	70	82	77	50	59	68	75	68	67	..	68.3
	Minimum	24	24	28	37	40	40	53	55	51	52	40	41	39	51	57	45	37	33	35	41	55	54	50	44	26	25	28	50	53	55	..	42.1
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	45	58	65	59	68	78	77	77	83	75	62	68	67	80	75	59	50	62	68	76	75	79	84	66	53	61	65	67	62	67	..	67.7
	Minimum	24	27	37	39	39	48	57	57	56	59	49	43	39	51	59	41	36	34	38	48	50	52	56	48	31	27	34	51	54	57	..	44.7
Lexington	Maximum	39	52	60	56	64	77	74	73	84	72	55	64	63	79	75	56	45	54	67	73	67	64	79	64	45	55	65	66	57	65	..	63.6
	Minimum	24	28	40	48	45	50	61	56	63	50	42	46	43	51	56	37	37	37	42	51	51	52	53	32	27	30	45	50	50	52	..	45.0
Louisville	Maximum	45	55	60	58	69	79	77	75	84	74	58	66	67	81	71	59	48	62	67	77	71	68	83	67	51	60	65	65	56	66	..	66.1
	Minimum	25	31	42	48	48	55	63	60	62	49	45	46	45	53	59	40	39	41	44	56	57	53	55	33	29	36	41	52	52	54	..	47.1
Do. (Cherokee Park)	Maximum	43	55	58	56	68	78	75	74	79	65	57	62	63	77	66	61	46	55	64	72	66	68	77	68	49	57	63	58	55	65	..	63.3
	Minimum	23	27	37	46	41	48	58	58	55	60	42	41	40	50	59	44	38	35	36	52	53	47	50	45	27	29	32	50	50	52	..	44.2
St. John	Maximum	47	55	64	65	69	78	77	76	82	66	60	69	68	80	75	60	54	60	67	70	70	73	85	80	52	52	67	70	60	70	..	67.4
	Minimum	24	26	37	47	37	47	60	57	57	57	42	39	39	52	57	44	36	33	39	51	54	51	53	40	28	25	32	53	54	55	..	44.2
Scott	Maximum	41	58	58	57	69	78	77	73	82	76	60	65	66	63	72	57	45	60	66	75	66	62	80	65	59	60	66	64	58	58	..	64.5
	Minimum	24	24	37	44	45	49	59	56	54	58	42	42	38	48	47	41	35	34	37	50	47	45	47	38	25	29	31	51	48	46	..	42.4
Shelbyville	Maximum	45	56	61	60	65	78	76	76	84	79	63	65	68	75	75	61	44	61	68	76	71	68	83	74	52	60	67	67	60	66	..	66.8
	Minimum	23	24	35	46	40	43	55	55	58	57	40	39	36	48	58	42	36	30	39	45	51	47	49	45	24	23	34	48	50	51	..	42.4
Taylorsville	Maximum	44	53	62	58	68	79	77	76	84	77	63	66	65	80	76	61	50	57	66	75	70	70	82	74	49	58	67	67	59	67	..	66.7
	Minimum	25	25	34	48	38	43	48	53	55	60	44	40	38	51	55	41	39	34	33	44	54	46	50	43	27	26	30	51	52	55	..	42.7
Williamstown	Maximum	52	60	58	56	70	79	78	75	84	80	62	64	67	72	75	58	45	60	67	75	70	65	88	76	54	59	68	70	59	63	..	67.0
	Minimum	21	24	36	49	47	50	58	55	58	59	42	43	39	51	50	43	38	35	39	52	48	48	54	41	26	27	39	50	49	49	..	44.1
Eastern Division.																																	
Beattyville	Maximum	45	60	69	67	70	84	83	84	86	82	70	74	72	85	85	71	55	61	65	75	81	76	80	75	59	62	65	70	62	66	..	71.3
	Minimum	19	19	25	42	38	34	44	46	49	60	49	37	38	43	50	41	39	38	30	40	36	39	35	52	29	25	28	52	54	54	..	39.5
Berea	Maximum	36	47	62	70	61	77	78	82	87	79	66	76	68	82	80	59	48	57	71	73	77	74	83	75	49	59	71	77	60	67	..	68.4
	Minimum	21	24	33	46	40	51	54	54	57	61	45	45	42	46	57	45	37	36	34	49	54	53	53	44	27	24	31	57	53	53	..	44.3
Farmers	Maximum	45	57	66	60	62	82	74	79	87	71	72	67	67	73	83	59	57	68	71	75	75	70	81	80	49	57	70	72	70	64	..	68.8
	Minimum	19	19	31	44	31	41	56	46	49	59	42	36	36	42	47	50	42	36	29	49	50	39	51	46	25	26	27	50	51	51	..	40.7
Harlan	Maximum	45	57	..	..	..	78	77	81	87	81	68	73	79	82	80	80	57	60	72	77	75	73	81	75	52	61	73	80	71	67	..	c71.9
	Minimum	25	24	..	..	..	33	47	47	49	64	47	42	50	45	51	53	39	40	33	40	53	45	52	51	34	29	30	56	56	57	..	c44.0
Maysville	Maximum	41	54	62	63	72	81	82	76	84	78	67	68	67	68	83	60	53	59	69	79	76	72	83	83	49	59	70	72	69	65	..	68.8
	Minimum	25	22	30	45	40	42	62	52	53	64	46	43	40	48	47	52	40	36	32	44	50	39	55	43	30	28	30	53	40	50	..	42.7
Mount Sterling	Maximum	38	51	61	55	69	79	80	80	86	75	66	62	63	73	80	65	49	56	68	76	73	72	82	75	55	56	71	73	65	65	..	67.4
	Minimum	24	25	30	45	37	43	43	55	56	65	44	42	42	47	50	49	35	35	35	45	52	45	52	55	25	26	29	50	50	52	..	42.8
Richmond	Maximum	44	56	65	65	67	80	79	79	88	68	69	69	68	80	80	54	47	60	71	76	76	68	82	64	52	60	70	74	61	67	..	68.0
	Minimum	21	24	35	45	40	48	60	56	57	60	42	44	41	48	61	44	34	34	37	49	53	49	52	52	27	26	34	53	52	53	..	44.4
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	45	57	68	63	68	81	78	82	88	80	68	78	75	85	82	66	52	56	76	78	78	78	85	83	63	61	73	81	63	66	..	71.9
	Minimum	26	24	30	42	43	46	50	48	50	50	45	41	43	40	64	52	39	36	31	38	40	43	51	51	31	27	29	34	56	58	..	41.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, April, 1915.



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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

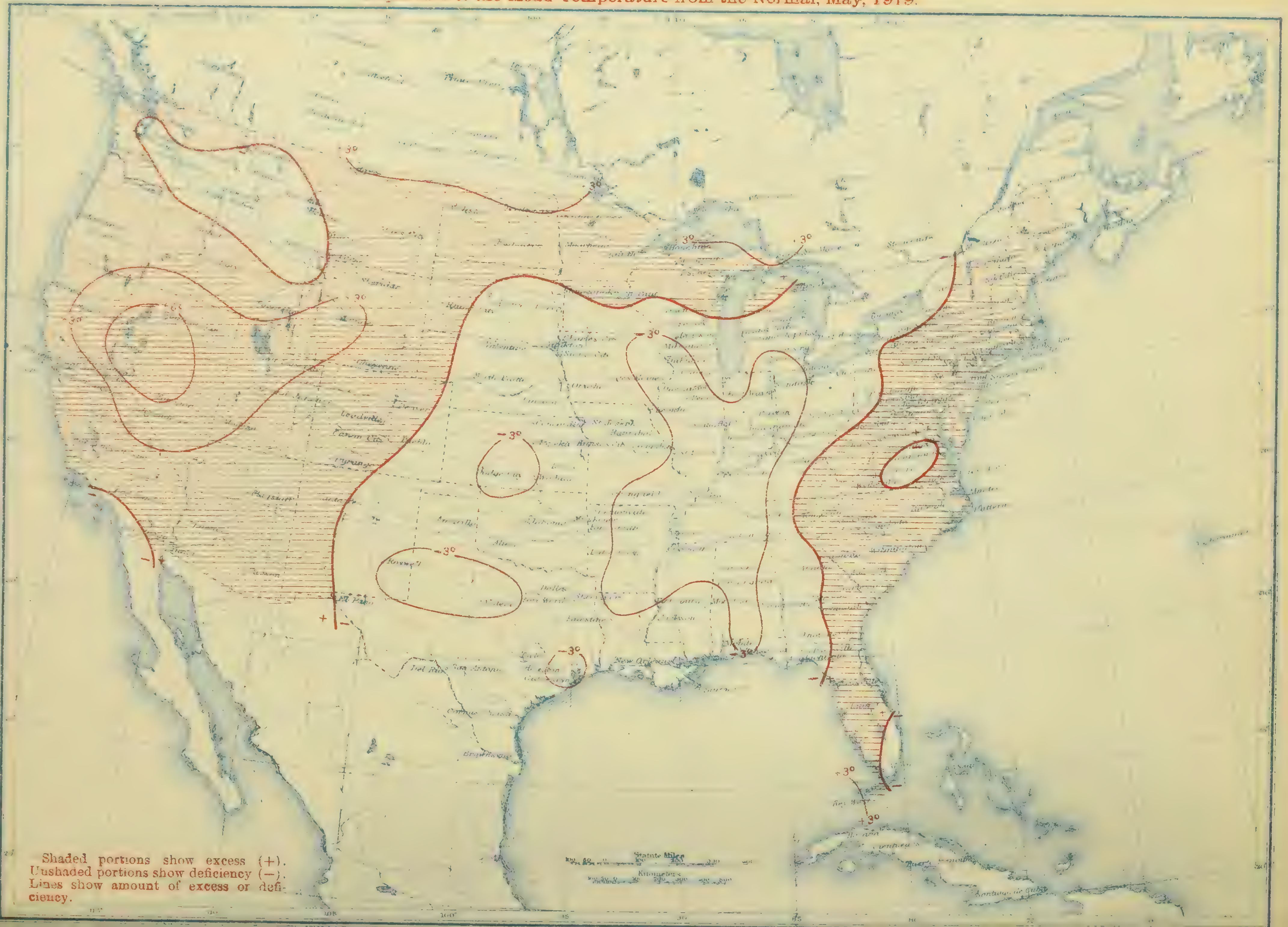
KENTUCKY SECTION

MAY, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 27, 1919.

Departure of the Mean Temperature from the Normal, May, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., May, 1919. No. 5

GENERAL SUMMARY.

Low temperature and excessive precipitation during May caused exceptionally unfavorable conditions for the growth of most crops. Frequent and heavy showers, beginning about the 7th and continuing almost daily until the 28th, with but one short intermission from the 11th to 14th, kept the soil generally too wet to be worked, stopped corn planting, promoted the growth of weeds, and brought most farm work to a standstill. A serious feature of the wet weather was that it prevented the preparation of the corn and tobacco land yet unbroken, amounting to nearly one-half the area to be planted in some localities, thus making a large part of these crops late. Transplanting of tobacco, which began about the 15th, was possible nearly every day for two weeks, the showery weather insuring an almost perfect stand. During most of the rainy period unseasonably low temperatures prevailed, minimum temperatures reaching 35° on the 12th. On account of the low temperature and wet soil corn germinated poorly, made but little growth, and the early planted became very weedy. Gardens fared likewise, making no progress of consequence until the return of sunshine and seasonal temperature near the end of the month. Because of the excessive moisture wheat grew rank and suffered some damage from lodging, while rust made its appearance in some localities. With the change to favorable weather near the end of the month corn and vegetables began to grow rapidly, and farming conditions as affected by the weather improved daily.

PRESSURE.

A peculiar feature of the pressure distribution during the first three weeks was the frequency of the occurrence of shallow troughs and depressions, following each other so closely as to merge together and produce a constant succession of showers. Well defined "lows", attended by heavy rains over Kentucky occurred as follows: 1st—moving northward over this State to the Lake region; 9-10th—with center moving eastward over Tennessee; 19-20th— a "low" of great force that moved northeastward over the Ohio Valley. During the rest of the month pressure formations lacked distinctive character, the situation being dominated mostly by high areas to the north and northeast and low pressure to the far south. The succession of "lows" was broken by strong "highs" on the 6th, 11-12th, and 17 (p. m.)-18th.

The mean sea-level pressure for the month, based on the reports of two stations, was 29.92 inches. The extremes were 29.48 inches on the 20th at Lexington, and 30.17 inches on the 5th at both Lexington and Louisville.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 63.9°, which is 1.7° below normal. There were a few warm days during the first week, but from the 8th to 25th temperatures were below normal nearly every day. A return to seasonal temperatures occurred on the 26th, and they continued above normal during the remainder of the month. Minimum temperatures in the 40's were registered at many stations on nearly every day in the period 9th-23d. The 12th was especially cold, minima ranging between 35° and 45° at most stations. The extremes were 95° at Earlington on the 29th and Maysville on the 31st, and the lowest 35° at Berea and St. John on the 12th.

PRECIPITATION.

Precipitation for the State, based on the reports of 51 stations averaged 6.05 inches, which is 2.10 inches above normal and the second highest average precipitation on record for this State for May. Over the counties bordering on the Ohio River and over the eastern mountain counties monthly amounts generally ranged between 4 and 7 inches. Over the central counties and southern districts west of the upper Cumberland River they were from 6 to nearly 12 inches. At the various stations amounts ranged between 3.72 inches at Williamsburg and 11.62 inches at Franklin. Rains occurred generally over the State in the periods; 1st; 7-10th; 16-17th, and 20-25th; while showers occurred somewhere in the State on nearly every other day. Rainfalls of one to more than three inches occurred in most sections on the 9th, and of one inch or over at many stations on the 1st, 7th, 8th, 20th and 25th. Thunderstorms occurred on several dates, and light hail was reported from a few localities on the 9th and 21st.

WIND.

The total wind movement at Louisville was 7,919 miles, and at Lexington 8,705 miles, with average hourly velocities of 10.6 and 11.7 miles, respectively. The maximum velocity for five minutes was at the rate of 48 miles per hour from the northwest on the 23d at Louisville, and 34 miles from the southwest on the 1st at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 76 per cent, at 12 noon 61 per cent, and at 7 p. m. 67 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 43 and at Lexington 39.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.		
	Monthly average	Departure from 30-year normal	Highest.	Lowest.	Monthly average	Departure from 30-year normal.	No. of days with .01 in or more
1889	63.6	− 2.0	94	28	4.03	+0.08	..
1890	63.9	− 1.7	93	32	4.22	+0.27	..
1891	62.6	− 3.0	90	29	1.78	−2.17	..
1892	64.6	− 1.0	90	36	5.49	+1.54	..
1893	63.2	− 2.4	96	37	5.59	+1.64	..
1894	64.5	− 1.1	99	32	3.54	−0.41	..
1895	63.9	− 1.7	99	29	3.16	−0.79	8
1896	72.2	+ 6.6	106	42	5.34	+1.39	11
1897	61.4	− 4.2	92	32	3.27	−0.68	10
1898	67.6	+ 2.0	93	31	4.52	+0.57	10
1899	68.8	+ 3.2	94	42	4.79	+0.84	11
1900	66.3	+ 0.7	96	29	3.49	−0.46	10
1901	63.7	− 1.9	97	34	2.65	−1.30	10
1902	70.0	+ 4.4	98	35	3.55	−0.40	9
1903	68.0	+ 2.4	98	29	3.09	−0.86	8
1904	65.0	− 0.6	98	33	3.05	−0.90	10
1905	68.0	+ 2.4	95	38	5.23	+1.28	11
1906	69.5	+ 3.9	95	31	2.54	−1.41	9
1907	61.3	− 4.3	93	30	5.07	+1.12	12
1908	66.7	+ 1.1	96	28	4.34	+0.39	12
1909	63.9	− 1.7	93	27	4.64	+0.69	12
1910	61.1	− 4.5	89	30	4.81	+0.86	12
1911	69.4	+ 3.8	105	29	2.46	−1.49	5
1912	66.7	+ 1.1	97	37	4.53	+0.58	10
1913	66.1	+ 0.5	99	29	2.92	−1.03	8
1914	66.5	+ 0.9	103	32	2.16	−1.79	5
1915	65.2	− 0.4	95	35	6.62	+2.67	15
1916	67.2	+ 1.6	98	33	4.02	+0.07	9
1917	58.9	− 6.7	92	30	3.43	−0.52	10
1918	69.4	+ 3.8	97	28	4.29	+0.34	8
1919	63.9	− 1.7	95	35	6.05	+2.10	14

Climatological data for May, 1919.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of days. With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	16	64.4	− 1.5	92	29	41	12	33	5.44	+1.66	1.20	0	15	18	7	6	e.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	63.9	− 2.6	84	29	47	2*	28	4.20	−0.44	0.76	0	18	5	13	13	ne.	E. W. Horr.
Calhoun	McLean	437	15	64.0	− 3.4	93	30	43	21	30	6.39	+2.78	1.08	0	17	8	9	14	s.	W. A. Taylor.
Earlington	Hopkins	420	28	65.9	− 0.9	95	29	43	2	36	5.60	+0.59	1.66	0	15	16	2	13	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	64.6	......	90	29	43	2	31	5.62	......	1.55	0	16	14	11	6	w.	C. R. Lovell.
Henderson	Henderson	327	11	......	......	......	......	......	......	......	5.13	+1.27	0.95	0	14	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	22	65.4	− 2.2	91	29	41	2	36	9.72	+5.49	2.12	0	17	4	12	15	s.	W. E. Graves.
Marion	Crittenden	571	20	64.4	− 2.7	87	29	45	12*	29	5.35	+1.06	1.00	0	11	9	12	10	w.	B. C. Paris.
Mayfield	Graves	364	9	^{b}63.8	− 2.5	86^{b}	29	45^{b}	2	28^{b}	6.09	+1.74	1.30	0	13	3^{b}	13^{b}	13^{b}	s.	J. N. Davis.
Owensboro	Daviess	479	22	63.0	− 3.0	88	29	44	2*	30	4.74	+0.90	1.02	0	16	5	12	11	s.	Henry S. Berry.
Paducah (near)	McCracken	341	19	65.6	− 3.6	90	30	45	23	33	5.02	+1.17	1.01	0	17	15	1	15	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{a}66.2	− 1.3	90^{a}	29	41^{a}	2	28	7.40	+2.17	1.50	0	15	14	0	16	n.	Ray Baker.
Russellville	Logan	590	6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	25	64.4	− 2.2	85	30	42	12	29	5.88	+2.00	1.65	0	8	8	9	14	s.	W. W. Hicks.
Anchorage	Jefferson	700	18	61.9	− 2.5	90	30*	38	18	39	5.25	+1.52	1.54	0	13	11	4	16	sw.	C. E. Barret.
Bardstown	Nelson	637	22	63.6	− 3.4	90	30*	41	12	31	7.02	+3.49	2.25	0	14	16	3	12	s.	Chas. M. Talbott.
Bowling Green	Warren	500	28	66.8	− 0.8	93	30*	44	12	32	9.31	+5.06	3.55	0	13	8	10	13	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	......	......	......	......	......	......	......	8.53	......	2.75	0	14	......	......	......	......	James H. Young.
Burnside	Pulaski	773	26	......	......	......	......	......	......	......	4.56	+0.49	1.21	0	10	......	......	......	......	F. E. Bradshaw.
Carrollton	Carroll	492	20	......	......	......	......	......	......	......	3.94	−0.10	0.91	0	13	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	5	......	......	......	......	......	......	......	5.84	......	1.40	0	17	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	25	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	P. W. Ray.
Eubank	Pulaski	1177	24	63.4	− 0.8	88	30*	38	12	38	8.21	+4.26	1.90	0	14	1	16	14	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	64.0	− 0.9	91	31	40	12	35	4.39	+0.58	1.26	0	14	12	5	14	w.	Mrs. Amelia Wood
Franklin	Simpson	691	23	65.4	− 1.6	90	29	42	18	30	11.62	+7.57	2.00	0	20	4	18	9	s.	V. P. Atkinson.
Greensburg	Green	581	26	63.6	− 1.3	88	29	39	12	38	7.72	+3.43	2.10	0	16	3	3	25	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	......	......	......	......	......	......	......	6.62	+2.80	2.10	0	18	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	21	63.6	− 2.7	89	30*	42	13	27	5.13	+1.72	0.70	0	12	8	8	15	sw.	W. J. Piggott.
Junction City	Boyle	985	25	63.6	− 0.4	90	30	37	12	38	5.99	+2.24	1.50	0	21	11	9	11	se.	Prof. E. L. Grubbs.
Lebanon	Marion	754	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Leitchfield	Grayson	635	23	63.2	− 2.3	89	29*	43	12	30	11.04	+7.04	3.50	0	14	9	9	13	ne.	John E. Stone.
Lexington	Fayette	989	31	62.3	− 2.0	90	30	43	13	25	6.38	+2.86	1.74	0	15	8	3	20	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	63.4	− 3.3	90	30	45	21	28	4.22	+0.58	0.93	0	15	5	9	17	ne.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	9	62.0	− 3.7	89	29	39	12	30	4.92	+1.04	1.06	0	16	8	12	11	s.	Wm. I. Hunt.
St. John	Hardin	777	22	62.8	− 1.9	89	29	35	12	31	7.51	+3.53	2.00	0	15	13	6	12	......	Sisters of Loretto.
Scott¶	Kenton	900	21	61.2	− 2.6	90	29	39	12	34	4.66	+0.60	1.27	0	14	7	9	15	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	62.0	− 3.0	92	30	36	12	32	4.89	+0.77	1.18	0	14	8	10	13	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	62.4	− 2.1	90	30	39	12	34	5.83	+2.36	2.34	0	16	8	3	20	sw.	E. D. Bourne.
Williamstown	Grant	943	16	62.2	− 0.9	90	30*	40	12	30	5.04	+1.49	1.53	0	16	8	11	12	......	Miss Rose Carter.
Woodbury	Butler	533	1	......	......	......	......	......	......	......	6.31	......	1.62	0	13	......	......	......	......	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	64.5	+ 0.3	90	29*	37	12	44	4.84	+0.69	1.36	0	14	10	7	14	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	64.6	− 1.2	90	29*	35	12	36	6.90	+2.92	2.12	0	12	11^{g}	5^{g}	8^{g}	......	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	......	......	......	......	......	......	......	6.90	+2.72	1.04	0	16	......	......	......	......	Forester Farley.
Cynthiana	Harrison	684	1	......	......	......	......	......	......	......	4.90	......	1.00	0	9	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	30	......	......	......	......	......	......	......	3.81	+0.14	0.97	0	11	11	7	13	e.	J. V. Oldham.
Farmers	Rowan	668	11	63.5	− 0.2	92	31	36	12	36	5.21	+1.15	1.30	0	10	11	14	6	w.	Mrs. Gertrude Thompson
Harlan	Harlan	1197	1	65.6	......	90	30*	41	2	39	7.19	......	1.55	0	13	8	12	11	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	......	......	......	......	......	......	......	5.83	......	1.26	0	9	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	4	......	......	......	......	......	......	......	6.65	......	2.05	0	9	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	15	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Carrie S. Adams.
Maysville	Mason	524	21	64.5	− 0.6	95	31	39	12	41	5.01	+0.96	1.10	0	14	13	8	10	n.	J. C. Armstrong.
Middlesboro	Bell	1128	21	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	B. H. Perkins.
Mount Sterling	Montgomery	930	29	63.7	− 0.4	91	30	36	12	36	6.93	+2.64	2.40	0	15	15	3	13	......	W. R. McKee.
Pikeville	Pike	634	13	......	......	......	......	......	......	......	4.03	+1.27	1.06	0	12	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	63.6	− 1.9	92	30	38	12	35	5.17	+1.59	0.92	0	16	11	5	15	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	P. V. Johnson.
Williamsburg	Whitley	939	21	66.0	0.3	91	31	39	12	44	3.72	−0.36	0.90	0	13	7	8	16	..	N. C. Jones.
State averages and extremes		..		63.9	....	95	29*	35	12	44	6.05	......	3.55	0	14	9	8	14	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

* Also on other dates. ** Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡Post-office address, Normal, Ky ; ‡‡Nerinx, Ky ; ¶Covington, Ky

MISCELLANEOUS.

May 7-10.—Heavy rains caused headwater floods and much damage to crops and soil in the southern tier of counties west of the upper Cumberland, especially in the Green River basin.

May 25.—A slight earthquake shock was felt at Louisville at about 4.40 a. m. Slight shocks were also reported from Hickman, Ky., on the 23d, 24th, 26th, and 27th.

Rivers.—The Ohio River rose rapidly in the upper reaches from the 9th to 14th, but flood stages were not approached. The rise continued several days longer in the lower river, reaching a crest of 33.1 feet at Evansville, Ind., on the 18th and 41.5 feet at Cairo, Ill., on the 16th, both stages only slightly below flood stage. Much corn in lowlands in the western part of the State was ruined by flooding due to this rise in the Ohio and Mississippi.

Daily Precipitation for May, 1919.

Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																
Beaver Dam ‖ G.	.32				.04		.10	.31	1.20	.51						.16	.55			.98	.63	.11	.28		.53		.30	.02				[illegible]
Blandville M.					.15	.07	.02	.47	.76						.22	.14	.06		.61	.04	.05	.70			.20	.30	.15		.11	.10	.02	[illegible]
Calhoun G.	.50				.08	T	.12	.56	1.08	.06					.04	.99	.02		1.00		.01	.42	.01	.37	.66	.01	.46					6.39
Earlington ‖ G.	.52				.05		.56	.45	1.66	.25						.04	.80			.78	.03	.04	.16		.27		[illegible]			.03		5.60
Greenville G.	.25					.16	.30	.60	1.55	.27						.44	.20		.85	.11	.04	.22		.17	.05		[illegible]			.01		[illegible]
Henderson O.	.82	T			.06			.26	.95	.25						.14	.03			.95		.50	.05	.38	.04		.60	.05				5.13
Hopkinsville C.	.53				.43	.15	.23	1.37	2.12	.67						.47	.85	.38		1.03	T.	.23	.51	T.	.16		.44	T.	.11	.04	T	9.72
Marion O.	.58		T			.38	T	.30	1.00						T	.67			.91	T	.47	.36			.25		.18				.25	5.35
Mayfield M.	1.15						.45	.40	1.30	.25						.10	.52			.87		.20	.23		.22		.35	.05				6.09
Owensboro ‡‖ O.	.29	.02			.08		.02	.22	.98	.31	T					.03	.62			1.02	T	.10	.16	.33		.05	.33	.18				4.74
Paducah (near) O.					.31	.13	.03	.35	1.01						.25	.66			.76	.03	.06	.38			.14	.26	.04	.35		.16	.10	5.02
Princeton G.	1.02				.15		.34	.65	1.50	.35						.44	.47			1.00	T.	.11	.35		.26		.25		.06		.45	7.40
Russellville‖‡ G.																																
Central Division.																																
Alpha C.						.50	.08	.40		.40							.90		1.65	T	T	1.10		.85	T.	T.						[illegible]
Anchorage O.	.34			T.	.15	T.	T	.28	1.54	.26						.23	.03		.34	.13	.33	.26		1.13	T.		.23					[illegible]
Bardstown ‡‖ S.	.46	.03			.19		.22	.19	2.25	1.11							.78			.81	.04		.15	.26	.24			.26				[illegible]
Bowling Green ‖ G.	.41						.37	.85	3.55	1.08						.18	1.00			.60	.05	T	.58		.33		.18	.10				9.31
Brownsville ‡‖ G.	.17	.03					.09	1.29	2.75	.86						.11	.98			.54	.03		.37		.48		.07	.40				8.53
Burnside ‖ C.	.53					T.	.09	T	.08	.64				T			.50			.72	.03	T.	.60	.16	1.21			T				4.56
Carrollton ‖ O.	.45	.07			.02		.04		.83	.53				.14	.02		.12			.45	.03		.33	.91								3.94
Cloverport ‖ O.	.28	.05			.02		.08	.11	.98	.42				T.		T	.64			.66	.02	.03	.25	.28	.18	1.40	.10	.34				5.84
Edmonton G.																																
Eubank ‖ C.	1.05					.23	.08	.12	1.90	.55							.65			.85	.11		.74	.15	1.31	.35		.12				8.21
Frankfort K.	.31	.02			.04	T.	.03	.04	1.26	.66				T			.39			.75	.07	T.	.43	.29	.02			.08				4.39
Franklin G.	.12					.71	1.50	1.67	1.34	.32						2.00	1.15		.11	.45	.27	.30	.10	.12	.25	.10	.83	.04	.16		.08	11.62
Greensburg ‖ G.	.11						1.08	.39	2.10	.44	.04						.95			.70	.06	.01	.53	.04	1.09	.01	.04	.13				7.72
High Bridge ‖ K.	.22	.02					.26	.41	2.10	.41	.05			.04	.16		.64			.66	.13	.05	.28	.56	.36		.08	.19				6.62
Irvington O.	.19				.63	T.	T.	.40	.70	.32						.60			.68	.23		.54		.28	T	.23	.33	T				5.13
Junction City K.	.37	.05				.14	.42	.34	1.50	.28	.04	.02	.01	.08		.06	.68			.51	.11	.15	.10	.32	.52	.03	.23					5.99
Lebanon S.																																
Leitchfield G.	.28				.10	.14	.28	2.50	1.50	.06						1.28			.54			.25		2.85	.94		.23				.09	11.04
Lexington *** K.	.16					.09	1.27	1.69	.53	.12			.01	.19		.41	.07		.64	.12		.23		.76			.09					6.38
LOUISVILLE*** O.	.09		T		.17	.01	T	.83	.57	.09				T.	T.	.30			.48	.02	.06	.27	.46	.47	.04		.36				T.	4.22
Do. (Cherokee Park) O.	.30				.16	T.	.03	.35	1.06	.34				T.		.27	.06			.59	.08	.31	.07	.87	.03		.38	.02				4.92
St. John ‡‖ S.	.34	.01			1.07		.03	.53	2.00	.68							.80			.77	.02		.19	.15	.35	.45	T.	.12				7.51
Scott L.	.51				T.	.01	.32	.61	1.27	.14				.07		.03	.12		.02	.51		.16	.06	.83								4.66
Shelbyville‖ S.	.30	.03			.16		.04	.02	1.18	.72				.02			.37			.75	.05		.38	.73				.14				4.89
Taylorsville S.	.50	T			.02	.07	.18	.61	2.34	.25			T.	T.		.37	.01		.13	.55		.26	.03	.17	.01	T.	.30					5.83
Williamstown ‖ L.	.43					.10	.05	.10	.50	1.53	.18				.25		.15	.05		.58	.05	.01	.15	.18	.73							5.04
Woodbury ‖‡ G.	.37						.04	.82	1.62	.62						.10	.72			.75		.08	.28		.44		.39	.08				6.31
Eastern Division.																																
Beattyville‖ K.	.74	T.				.06	.04	.10	1.36	.55	.02			T			.21			.97	.02		.38	.04	.29	.02						4.84
Berea K.	.72								2.12	1.13						.22	.48		.10	.51		.14	.36	.45	.52		.15					6.90
Catlettsburg‖ B.	.41	.02		.02		1.04	.82	.41	1.02	.65					.76		.21			.70	.22	.05	.17	.20	.20							6.90
Cynthiana ‡‖ L.	.50	T		T	T.		.15	.05	1.00	.80	T.				T		.45			.95	T.		.55	.45			T	T				4.90
Falmouth ‖ L.	.36	.07					.02		.97	.56							.22			.63	.01		.38	.57				.02				3.81
Farmers L.		.85					.01	.25	1.30					.35			.35			.40		.20	1.30	.20								5.21
Harlan K.	1.26						1.20		.29					.55			.44			1.55	.03		.13	.13	1.41	.05		.11	.04			7.19
Jackson ‖ K.	.55					T.	T	.55	1.25	.33	T.			.17	T.		.62			1.26			.50	T	.60			T				5.83
London ‖ C.	.55					.90	.20	2.05	.40	.75										1.05			.60	.15								6.65
Louisa ‖ B.																																
Maysville‖ O.	.78	.20		.01			.15	.10	1.10	.95				.01	.06		.56			.20	.20		.34	.35								5.01
Middlesboro C.																																
Mount Sterling ‖ L.	.70	.09					.06	.26	2.40	.74	.10			.25	.35		.55			.27	.10	T	.20	.18	.68	T.		T.				6.93
Pikeville B.	.32	.25					.12	.32						.32			.60			1.06	.30	.32	.10	.06	.26							4.03
Richmond ‖ K.	.45	.02				.02	.10	.14	1.60	.33				.04	.28		.67			.30	.05		.28	.12	.57		T	.20				5.17
Weeksbury B.																																
Williamsburg‖ C.	.28	T.				.18	.68	.09	.02	.05	T.			.08			.57	.05		.63	T.		.15	.04	.90		T					3.72

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking: (K) Kentucky: (S) Salt: (G) Green: (C) Cumberland (T) Tennessee; (O) Ohio; (M) Mississippi.

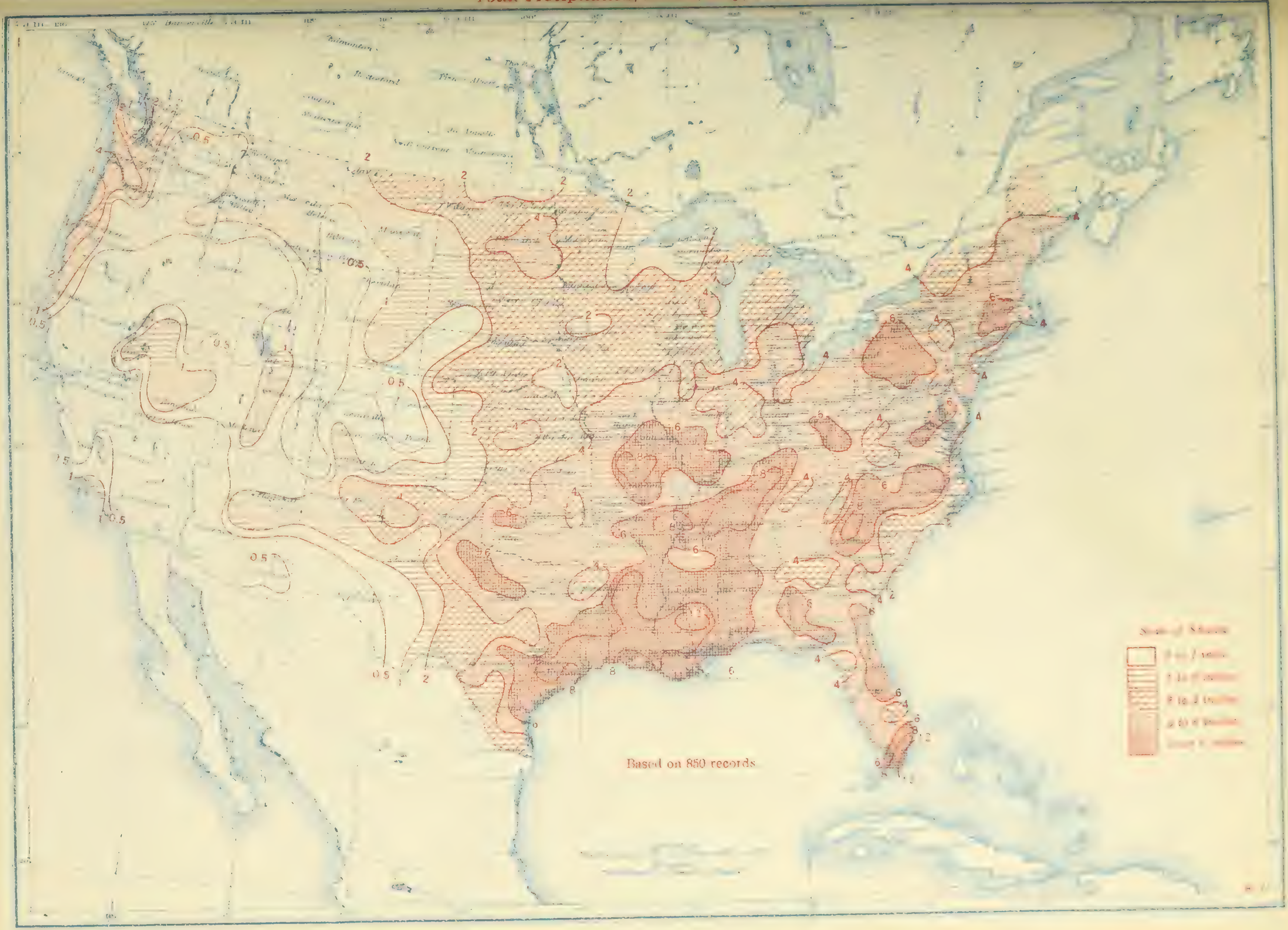
Daily temperatures for May, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	70	75	84	86	77	75	71	74	70	70	70	67	72	75	80	71	74	75	73	58	63	60	75	76	84	85	73	87	92	90	88	75.5
	Minimum	54	43	51	61	62	59	64	59	52	49	46	41	49	47	48	56	44	44	44	51	45	48	44	58	60	57	63	61	61	66	67	53.4
Blandville	Maximum	69	71	79	81	78	72	67	75	57	64	69	62	69	73	76	72	71	73	63	61	61	61	76	74	74	75	79	83	84	83	81	72.0
	Minimum	52	47	60	63	63	60	62	57	47	50	49	50	48	48	52	59	49	52	54	50	48	50	48	57	63	63	63	63	66	69	68	55.8
Calhoun	Maximum	68	74	81	83	81	75	71	76	73	59	70	64	70	73	76	66	72	74	73	56	65	62	74	73	83	83	78	85	91	93	85	74.4
	Minimum	54	44	55	63	60	57	64	58	48	49	48	44	47	47	48	56	49	47	46	49	43	48	45	55	62	58	62	61	64	67	66	53.7
Earlington	Maximum	73	79	81	88	81	75	74	79	71	61	74	69	74	76	82	71	74	79	81	60	65	63	80	82	85	87	79	88	95	93	91	77.7
	Minimum	55	43	55	61	62	59	64	59	50	50	47	45	49	45	47	57	48	46	45	51	45	48	44	57	63	57	66	62	64	66	66	54.1
Greenville	Maximum	70	74	84	83	82	80	74	77	74	60	69	69	69	76	77	75	72	73	75	61	66	57	75	82	85	82	78	84	90	89	86	75.7
	Minimum	55	43	55	62	61	60	64	59	50	49	46	45	47	45	47	55	49	46	45	50	45	48	44	62	56	54	64	61	64	64	66	53.6
Hopkinsville	Maximum	74	77	87	82	80	75	73	74	71	59	72	65	74	75	83	80	74	76	74	64	67	67	78	76	84	81	81	87	91	90	88	76.7
	Minimum	54	41	56	61	52	61	63	60	52	51	47	46	48	46	47	56	51	48	48	51	47	47	45	55	59	59	65	63	65	67	67	54.1
Marion	Maximum	72	78	80	84	80	78	68	75	61	60	69	65	70	75	73	68	74	74	79	64	61	58	75	76	72	77	72	85	87	85	84	73.5
	Minimum	53	52	55	57	57	59	61	56	47	49	49	45	57	53	59	54	48	48	56	49	45	48	46	57	57	69	64	62	65	68	68	55.3
Mayfield §§	Maximum	67	72	79	81	80	73	69	76	61	..	68	61	70	73	78	74	73	73	65	61	61	65	71	73	77	75	79	..	86	85	82	^{b}72.7
	Minimum	53	45	49	63	61	60	62	61	49	48	..	49	48	47	50	52	50	49	51	50	48	49	48	57	62	63	64	95	..	69	68	^{b}54.8
Owensboro	Maximum	66	70	80	82	76	74	70	76	63	60	68	66	66	71	75	65	70	71	72	55	65	57	73	70	78	82	73	85	88	87	87	72.3
	Minimum	55	44	50	62	61	57	62	56	49	50	51	46	49	51	50	54	50	49	48	51	44	45	45	47	58	60	60	62	63	66	67	53.6
Paducah (Lone Oak)	Maximum	72	73	80	84	77	76	72	79	63	62	68	70	72	74	82	75	75	78	81	67	64	63	78	79	80	81	83	86	88	90	86	76.1
	Minimum	54	56	48	64	60	60	63	58	48	50	49	48	50	48	52	50	51	50	51	50	46	46	45	56	60	64	65	64	66	68	64	55.0
Princeton §§	Maximum	69	77	85	83	78	73	66	77	52	60	70	63	..	73	81	73	72	75	70	59	64	57	78	80	82	80	74	79	90	89	89	^{a}77.3
	Minimum	55	41	55	60	60	60	65	62	49	50	55	46	48	..	45	57	46	50	50	50	45	50	43	58	63	62	65	63	63	68	66	^{a}55.0
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	64	68	80	84	75	68	70	73	75	65	64	71	61	67	69	76	66	73	73	60	55	55	75	68	78	80	71	80	82	85	83	71.4
	Minimum	57	50	60	70	68	60	67	64	64	54	53	42	50	54	53	55	55	50	48	52	50	44	54	60	61	66	65	64	62	63	66	57.5
Anchorage	Maximum	65	69	78	84	77	72	77	69	67	57	63	62	68	73	74	69	70	77	72	56	61	56	68	71	75	81	78	85	89	90	90	72.4
	Minimum	52	43	47	60	61	50	60	54	47	47	49	45	44	52	44	53	46	38	43	49	43	41	48	49	55	58	63	60	63	65	65	51.4
Bardstown	Maximum	67	71	81	85	85	73	76	75	64	57	63	62	68	73	77	71	70	69	75	59	62	56	71	67	76	85	79	85	88	90	90	73.2
	Minimum	55	43	50	59	63	55	66	61	52	50	52	41	46	50	49	56	52	43	44	53	46	46	50	56	60	59	65	63	62	62	66	54.0
Bowling Green	Maximum	71	75	86	89	86	81	71	80	68	67	73	71	76	76	82	81	74	78	75	63	66	58	76	76	86	86	77	88	91	93	93	77.8
	Minimum	55	46	50	60	63	61	65	63	62	52	50	44	48	48	50	57	54	48	62	52	45	47	48	58	60	60	65	64	66	66	62	55 8
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	67	70	81	85	80	73	74	77	76	62	62	60	63	72	76	80	71	73	73	63	60	56	69	73	80	85	76	84	88	88	88	73.7
	Minimum	56	40	43	55	61	59	65	63	61	51	50	38	46	50	45	59	51	42	41	49	45	42	50	57	59	59	64	60	60	61	61	53.0
Frankfort	Maximum	68	69	81	84	83	76	79	75	72	57	60	62	69	72	75	74	69	69	76	75	61	61	69	70	75	81	81	86	90	90	91	74.2
	Minimum	55	45	46	60	64	54	65	60	50	50	52	40	46	57	51	55	53	42	44	53	48	46	51	52	58	58	66	61	61	65	63	53.9
Franklin	Maximum	69	73	84	82	82	71	73	79	71	58	67	66	71	75	80	83	72	70	75	66	64	57	74	73	82	85	78	84	90	87	85	75.0
	Minimum	55	46	55	62	65	62	65	62	58	52	52	43	46	48	52	61	54	42	45	52	46	47	50	59	62	60	66	65	66	67	67	55.9
Greensburg	Maximum	67	71	82	85	81	74	75	77	70	60	65	63	69	74	77	79	72	70	75	63	64	58	72	75	80	85	79	86	88	88	86	74.5
	Minimum	55	41	44	53	60	57	63	62	57	50	50	39	45	49	45	55	52	43	41	50	47	43	45	57	60	59	65	60	62	63	63	52.7
Irvington	Maximum	66	70	80	83	80	73	72	72	64	59	64	67	67	69	69	67	69	71	74	57	61	58	70	69	78	84	78	85	88	89	89	72.3
	Minimum	56	47	56	56	64	55	65	64	50	49	49	47	42	51	47	59	51	47	47	51	45	45	49	53	66	63	63	62	64	70	69	54.9
Junction City	Maximum	67	70	81	84	83	76	75	75	78	61	64	61	65	73	75	76	71	70	74	77	60	75	70	69	77	83	75	86	89	90	89	74.5
	Minimum	55	43	43	56	66	64	65	63	60	49	49	37	43	51	55	52	53	41	40	50	45	43	50	49	59	56	62	59	61	62	60	52.6
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	66	71	81	78	72	70	70	68	67	57	66	62	59	72	76	72	69	73	72	62	62	56	71	69	80	83	73	86	89	89	87	72.2
	Minimum	55	44	51	63	57	64	64	61	51	48	49	43	47	48	48	56	51	47	48	48	44	47	47	54	61	62	63	62	65	67	66	54.2
Lexington	Maximum	64	67	79	83	75	71	74	73	63	53	56	56	66	68	73	69	65	68	73	60	58	55	66	64	72	80	79	83	88	90	88	70.2
	Minimum	51	48	54	63	55	52	63	58	51	48	46	44	43	55	54	54	52	49	50	47	46	47	50	50	59	60	63	64	65	70	71	54.3
Louisville	Maximum	63	69	80	84	76	71	76	70	55	57	63	61	69	72	75	66	68	72	72	56	59	55	69	70	75	81	77	86	90	90	89	71.5
	Minimum	52	49	53	67	64	54	56	55	48	48	49	45	47	55	56	57	52	49	52	50	45	48	50	51	57	63	66	65	62	71	70	55.4
Do. (Cherokee Park)	Maximum	66	71	81	84	75	73	74	71	58	60	62	61	69	71	73	66	68	70	72	58	57	59	72	72	75	80	79	85	89	86	85	71.7
	Minimum	53	45	48	62	62	52	63	55	47	47	49	39	44	52	49	56	49	42	45	49	44	46	49	49	55	59	63	61	59	65	65	52.4
St John	Maximum	70	70	79	83	80	78	78	74	73	61	65	60	69	75	76	66	71	71	73	62	63	60	71	70	78	84	72	84	89	88	86	73.5
	Minimum	54	42	51	56	54	55	58	50	50	49	50	35	46	49	48	56	49	46	42	55	42	46	58	48	55	60	61	61	61	65	66	52.2
Scott	Maximum	64	69	77	82	76	70	74	68	52	54	54	54	69	73	73	69	65	74	68	63	57	64	63	70	79	80	82	83	90	90	89	70.8
	Minimum	54	46	48	61	60	45	64	52	46	47	48	39	42	55	50	57	50	40	40	50	45	43	49	51	49	57	61	60	58	66	65	51.5
Shelbyville	Maximum	65	70	80	84	81	72	78	71	68	56	62	60	69	74	76	68	70	72	74	64	60	59	70	68	76	82	79	87	91	92	91	73.2
	Minimum	51	42	48	57	60	49	63	51	46	47	48	36	41	53	46	55	48	38	45	49	45	43	47	48	54	57	62	59	59	64	64	50.8
Taylorsville	Maximum	66	70	79	84	78	70	76	71	67	57	61	59	67	72	76	68	68	71	73	61	61	55	71	69	77	79	75	84	89	90	87	72.0
	Minimum	55	44	45	57	62	55	65	58	49	49	51	39	46	53	47	58	51	41	42	51	46	45	49	51	55	59	65	61	62	64	63	52.8
Williamstown	Maximum	67	71	78	84	79	69	78	71	60	53	51	57	65	73	73	68	64	72	72	60	59	59	65	72	76	84	84	86	89	90	90	71.6
	Minimum	54	46	49	64	62	47	64	56	47	47	48	40	42	55	49	58	50	44	49	50	49	45	49	51	53	57	61	60	59	67	67	52.8
Eastern Division.																																	
Beattyville	Maximum	71	75	85	86	85	77	78	78	72	64	65	61	66	79	79	84	74	73	74	69	65	66	72	75	77	85	77	88	90	90	90	76.5
	Minimum	56	41	41	48	52	59	62	60	63	53	51	37	43	55	48	66	53	42	39	55	49	42	48	53	58	56	60	59	59	61	60	52.5
Berea	Maximum	67	71	83	87	81	82	83	82	77	58	62	62	70	74	76	80	80	71	78	66	66	58	70	71	70	75	77	86	90	89	90	75.5
	Minimum	54	45	49	58	64	64	65	63	57	51	49	35	45	52	52	52	54	40	42	50	47	45	48	55	59	60	60	62	65	66	61	53.8
Farmers	Maximum	65	69	78	84	79	75	70	72	75	61	60	63	72	70	73	74	79	80	73	75	71	58	69	68	80	86	78	88	89	90	92	74.7
	Minimum	57	42	49	54	54	52	62	59	59	51	50	36	43	55	47	54	53	47	52	56	49	40	51	51	55	52	58	60	58	60	56	52.3
Harlan	Maximum	70	78	81	87	80	81	77	79	81	65	65	71	70	71	76	82	74	74	78	78	66	64	72	78	79	86	82	88	88	90	90	77.5
	Minimum	55	41	42	50	54	58	60	62	60	57	53	42	50	52	53	49	57	45	59	42	49	46	53	57	59	60	62	60	63	60	58	53.8
Maysville	Maximum	67	71	84	87	86	79	81	75	65	56	59	60	72	71	77	76	70	73	78	74	64	63	69	76	80	84	84	89	93	94	95	75.9
	Minimum	57	46	43	63	61	52	64	60	52	51	50	39	45	57	51	52	54	38	56	58	48	43	51	52	55	53	55	59	58	63	60	53.1
Mount Sterling	Maximum	68	69	82	84	81	78	80	76	76	58	59	58	68	70	75	77	68	67	79	69	62	64	69	71	77	81	83	84	89	91	90	74.3
	Minimum	57	41	46	60	61	54	64	58	56	49	49	36	44	55	52	54	50	40	44	55	47	42	50	49	58	56	64	61	63	65	63	53 1
Richmond	Maximum	66	70	83	87	79	74	78	74	71	55	63	63	66	70	74	77	70	73	75	60	61	57	69	68	76	85	78	87	91	92	89	73.6
	Minimum	55	45	48	60	61	57	64	60	59	49	49	38	43	54	50	58	51	43	44	53	45	44	48	52	57	58	62	60	62	66	64	53.5
Weeksbury	Maximum		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	66	72	88	89	85	78	81	81	83	68	65	73	67	75	80	85	80	83	81	79	63	61	78	75	82	82	80	87	89	90	91	78.6
	Minimum	58	44	44	47	46	60	64	60	60	55	40	39	50	54	53	54	59	51	41	55	51	43	46	58	58	60	63	60	60	60	59	53.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c} etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, May, 1914.



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CLIMATOLOGICAL DATA

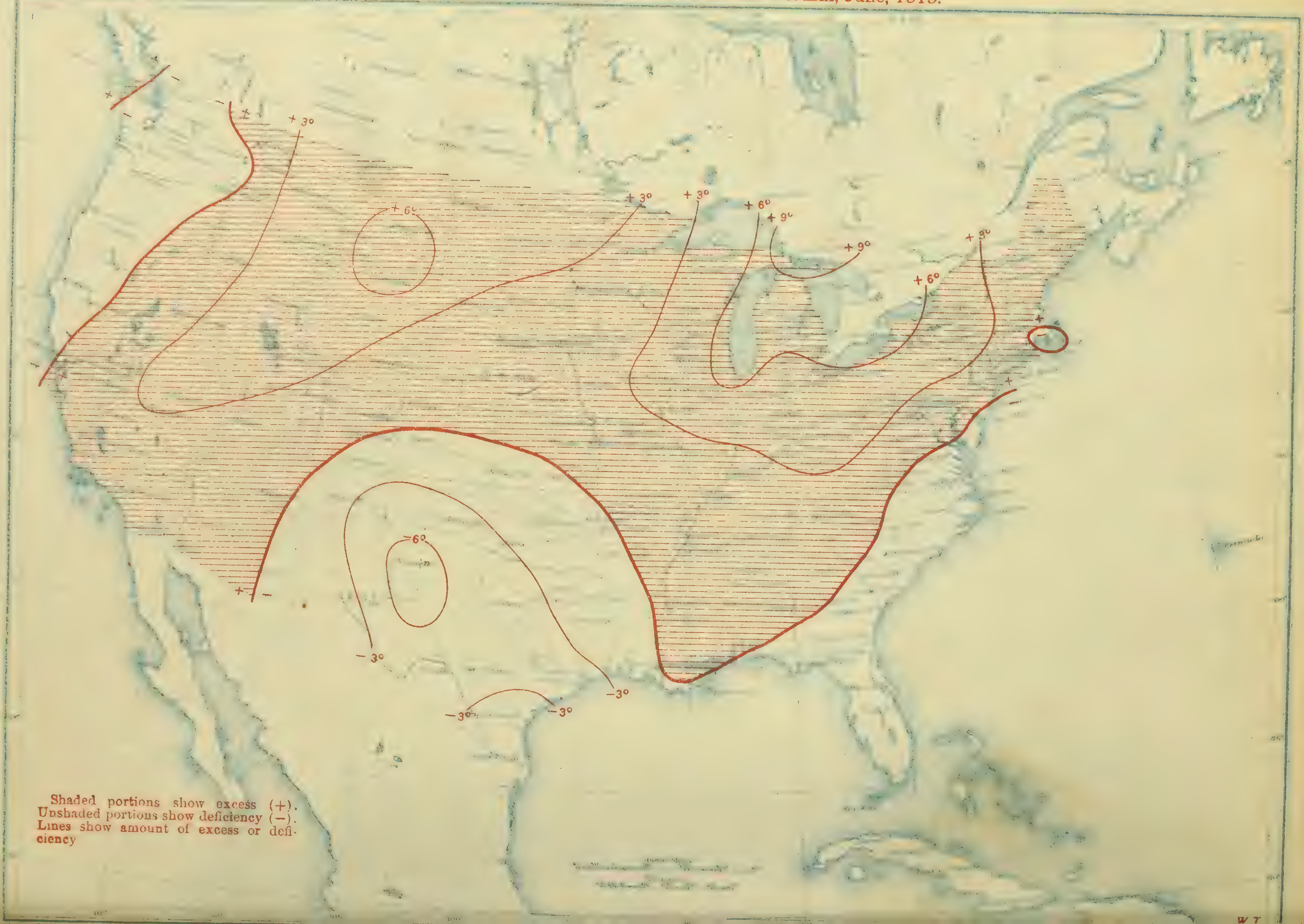
KENTUCKY SECTION

JUNE, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 27, 1919

Departure of the Mean Temperature from the Normal, June, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., June, 1919. No. 6

GENERAL SUMMARY.

The weather during the month was generally favorable for growth and cultivation of crops, compensating in a large measure for the unfavorable weather of the preceding May. With the exception of June, 1914, this was the warmest June on record in the State. Daily mean temperatures were almost continuously above normal, resulting in unusually rapid growth of all crops, especially corn. Rapid progress was made in cultivation, but farm work was already so delayed that farmers were not able to clear their crops of weeds by the end of the month. Occasional fields of corn in the western counties were abandoned to weeds. All through the month farmers were preparing corn and tobacco land at great disadvantage on account of the heat—work that was pushed forward into June by the wet weather of May. Considerable corn was not planted because the soil could not be prepared. The high temperature also hastened the ripening of grain, and harvesting became general in southern and western counties by the 15th, and in central and northern counties by the 24th. Heavy rains during the last week delayed harvesting and threshing in some sections, but enabled farmers to complete transplanting of tobacco. Although the total rainfall was less than the normal amount in many localities, it occurred in such a way as to keep the soil wet for two extended periods, one in the first decade and the other during the last week. The unseasonable crowding together of farm activities, due mainly to the unfavorable weather of May, resulted in a large part of the principal crops being planted much later than usual, with a considerable curtailment of the corn crop.

PRESSURE.

Areas of high pressure lying to the eastward, northeastward or southeastward of this section, and shallow low pressure areas to the westward, northwestward or southwestward characterized the pressure situation during most of the month. This State generally lay between these "highs" and "lows", in the area favorable for the formation of local thundershowers. One well developed low passed to the northwestward on the 24-25th, attended by heavy rains over most of the State. Strong "highs", usually lying to the northward, were dominant during the 10-16th and 26-30th.

The mean sea-level pressure for the month, based on the reports of two stations, was 30.07 inches. The extremes were 29.82 inches at Louisville on the 24th, and 30.38 inches at both Louisville and Lexington on the 13th.

TEMPERATURE.

The average temperature of the State, 38 stations reporting, was 76.7°, which is 3.0° above normal. Hot days, with maximum temperatures near or above 90°, and unusually warm nights for June, were the rule. There were only a few days with minimum temperatures below 60°, while at many stations there were 10 to 20 days with maxima of 90° or above. The extremes were 103° at Earlington on the 17th, and 51° at Beattyville on the 29th.

PRECIPITATION.

Precipitation for the State, based on the reports of 52 stations, was 4.00 inches, which is only slightly below normal. In the north-central counties and southwestward along the Ohio to Daviess County, monthly amounts ranged from four to more than seven inches. In most of the southern counties amounts were generally less than four inches, and in many places less than three inches. Amounts at the various stations ranged between 1.48 inches at Franklin and 8.01 inches at Woodbury. Rain periods were not well defined, local showers occurring practically every day in several localities, and frequently succeeding each other for several days in the same locality. Moderate to heavy rains were quite general during the last week, with 24-hour rainfalls ranging between 2.00 and 3.50 inches at several stations. Thunderstorms were unusually frequent with several casualties from lightning.

WIND.

The total wind movement at Louisville was 6,183 miles, and at Lexington 7,109 miles, with average hourly velocities of 8.6 and 9.9 miles, respectively. The maximum velocity for five minutes was at the rate of 40 miles per hour from the northeast on the 27th at Louisville, and 38 miles from the southeast on the 11th at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 77 per cent, at 12 noon 56 per cent, and at 7 p. m. 65 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 74 and at Lexington 59.

MISCELLANEOUS

June 7.—A farmer was killed by lightning near Folsomdale, McCracken County, while hoeing in the field. A barn was burned by lightning near Shelby City.

June 8.—Hail storms caused heavy damage to crops in Woodford, Scott, Bourbon, and Lincoln counties. Chickens and lambs were killed by the hail. One man was killed by lightning and another stunned while fishing in the Ohio River near Orell. A half dozen barns were blown down and much wheat ruined by heavy storms in Lincoln County.

(Continued on next page.)

COMPARATIVE DATA FOR JUNE.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	70.6	−3.1	99	38	5.27	+1.09	
1890	78.4	+4.7	101	51	4.96	+0.78	
1891	77.1	+3.4	97	51	4.48	+0.30	
1892	75.8	+2.1	101	48	4.23	+0.05	
1893	73.3	−0.4	97	46	4.64	+0.46	
1894	75.6	+1.9	102	35	2.69	−1.49	
1895	75.9	+2.2	104	47	3.63	−0.55	
1896	73.5	−0.2	98	46	4.64	+0.46	10
1897	73.4	−0.3	101	41	3.61	−0.57	9
1898	76.2	+2.5	101	45	3.90	−0.28	9
1899	76.1	+2.4	100	44	2.80	−1.38	8
1900	73.9	+0.2	100	40	6.14	+1.96	11
1901	75.6	+1.9	104	42	3.97	−0.21	9
1902	73.4	−0.3	101	39	4.75	+0.57	11
1903	68.6	−5.1	96	37	3.61	−0.57	10
1904	73.2	−0.5	99	48	3.14	−1.04	11
1905	74.8	+1.1	106	45	4.49	+0.31	10
1906	73.9	+0.2	99	42	4.53	+0.35	11
1907	70.2	−3.5	95	41	4.91	−0.73	11
1908	73.4	−0.3	102	43	4.36	+0.18	7
1909	74.5	+0.8	99	43	5.03	+0.85	14
1910	70.0	−3.7	99	36	5.20	+1.02	10
1911	75.2	+1.5	106	45	4.06	−0.12	10
1912	73.2	−3.5	95	38	3.55	[illegible]	10
1913	75.0	+1.3	107	38	2.87	−1.31	7
1914	78.3	+4.6	108	45	2.30	−1.88	5
1915	71.7	−2.0	95	42	4.79	+0.61	12
1916	70.1	−3.6	99	45	4.94	+0.76	11
1917	70.9	−2.8	100	39	4.30	+0.12	10
1918	73.6	−0.1	104	37	3.63	−0.55	8
1919	76.7	+3.0	103	51	4.00	−0.18	10

Climatological data for June, 1919.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	77.9	+ 4.3	95	12†	57	29	31	2.71	−0.72	0.52	0	12	25	4	1	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	76.9	+ 2.0	91	16†	58	5†	27	4.79	+0.43	1.56	0	8	2	23	5	se.	E. W. Horr.
Calhoun	McLean	437	15	^{a}77.3	+ 2.3	93^{a}	12†	57^{a}	5	27^{a}	2.68	−0.95	0.73	0	11	6^{a}	21^{a}	2^{a}	se.	W. A. Taylor.
Earlington	Hopkins	420	28	80.0	+ 4.4	103	17	58	5†	34	2.40	−1.13	0.65	0	11	16	3	11	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	77.1	......	93	15†	57	6	30	2.58	......	0.92	0	8	19	10	1	w.	C. R. Lovell.
Henderson	Henderson	327	11	...	...	...	...	...	...	...	3.28	−0.95	1.70	0	7	...	...	...	...	W. W. Shelby.
Hopkinsville	Christian	524	22	78.6	+ 3.4	97	16†	57	6	30	2.89	−1.39	0.51	0	10	9	17	4	e.	W. E. Graves.
Marion	Crittenden	571	20	77.2	+ 2.3	93	16†	59	6	26	2.62	−1.03	0.65	0	8	7	22	1	s.	B. C. Paris.
Mayfield	Graves	364	9	76.2	+ 2.6	91	16†	57	5†	27	3.65	+1.05	1.00	0	8	4	19	7	s.	J. N. Davis.
Owensboro	Daviess	479	22	77.2	+ 3.1	94	16	58	6†	29	6.20	+2.63	1.45	0	12	12	6	12	s.	Henry S. Berry.
Paducah (near)	McCracken	341	19	78.8	+ 1.0	96	22	57	5	32	5.34	+0.87	0.76	0	14	19	8	3	se.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{b}78.3	+ 2.3	96^{b}	17	55^{b}	6	27	2.28	−1.81	1.01	0	6	17^{b}	0^{b}	1^{b}	s.	Ray Baker.
Russellville	Logan	590	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	25	74.9	+ 1.8	88	16	60	4†	21	4.60	−0.44	1.10	0	7	14^{b}	6^{b}	8^{b}	......	W. W. Hicks.
Anchorage	Jefferson	700	18	75.4	+ 3.4	93	16	55	29	31	3.94	+0.29	1.49	0	15	20	9	1	sw.	C. E. Barret.
Bardstown	Nelson	637	22	76.7	+ 2.1	93	21	59	6	27	5.05	+0.71	2.41	0	11	23	0	7	s.	Chas. M. Talbott.
Bowling Green	Warren	500	28	79.6	+ 3.8	97	12†	60	6	30	3.36	−0.51	1.02	0	9	9	15	6	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	...	...	...	...	...	...	...	5.29	......	3.49	0	13	...	...	...	...	James H. Young.
Burnside	Pulaski	773	26	...	...	...	...	...	...	...	2.55	−1.83	1.26	0	7	...	...	...	...	F. E. Bradshaw.
Carrollton	Carroll	492	20	...	...	...	...	...	...	...	3.10	−0.49	1.35	0	11	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	5	...	...	...	...	...	...	...	4.34	......	3.25	0	13	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eubank	Pulaski	1177	24	74.6	+ 3.5	90	2†	57	6	29	4.57	+0.49	1.80	0	11	4	12	14	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	77.2	+ 3.9	93	11	60	9†	27	4.97	+0.77	1.32	0	9	16	5	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	78.6	+ 3.7	95	22	60	6	27	1.48	−2.49	0.41	0	9	12	13	5	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	75.3	+ 1.8	93	17	55	29	30	3.23	−1.22	0.65	0	8	5	7	18	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	...	...	...	...	...	...	...	2.21	−1.78	0.82	0	8	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	21	77.0	+ 3.3	91	12†	59	29	25	7.37	+3.38	3.25	0	5	18	4	8	sw.	W. J. Piggott.
Junction City	Boyle	985	25	75.4	+ 3.8	93	21	54	29	33	2.56	−1.26	0.80	0	12	11	10	9	se.	Prof. E. L. Grubbs.
Lebanon	Marion	754	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leitchfield	Grayson	635	23	76.4	+ 3.5	91	16†	58	29	28	2.49	−1.50	0.97	0	10	18	9	3	sw.	John E. Stone.
Lexington	Fayette	989	31	76.4	+ 3.2	93	11	59	29	24	4.49	+0.50	1.70	0	14	10	13	7	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	77.8	+ 2.8	92	16	58	29	27	4.41	+0.18	2.78	0	13	12	15	3	sw.	U. S. Weather Bureau.
Do. Cherokee Park	Do.	534	9	...	...	...	...	58	29	...	6.15	+2.59	2.44	0	15	12	12	6	s.	Wm. I. Hunt.
St. John	Hardin	777	22	76.1	+ 3.8	92	12	57	29	28	5.58	+1.58	1.94	0	11	20	3	7	......	Sisters of Loretto.
Scott¶	Kenton	900	21	75.1	+ 3.5	92	2†	54	29	29	2.78	−0.90	0.79	0	10	8	18	4	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	75.8	+ 2.3	94	11	54	29	32	6.31	+1.85	1.90	0	9	12	12	6	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	75.6	+ 3.3	92	20	55	29	29	4.19	−0.34	0.98	0	12	13	10	7	ne.	E. D. Bourne.
Williamstown	Grant	943	16	76.2	+ 5.6	98	12	56	29	30	3.28	−0.45	0.78	0	11	11	14	5	......	Miss Rose Carter.
Woodbury	Butler	533	1	...	...	...	...	...	...	...	5.18	......	1.32	0	13	...	...	...	...	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	76.1	+ 4.1	95	19†	51	29	34	4.21	−0.50	0.97	0	12	10	14	6	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	77.1	+ 4.6	94	13†	59	29	32	3.41	−1.47	1.50	0	8	13	8	9	sw.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	...	...	...	...	...	...	...	3.53	−0.90	0.85	0	9	...	...	...	...	Forester Farley.
Cynthiana	Harrison	684	1	...	...	...	...	...	...	...	4.45	......	1.30	0	11	...	...	...	...	P. H. Kehoe.
Falmouth	Pendleton	600	30	...	...	...	...	...	...	...	5.64	+1.47	2.80	0	13	16	9	5	......	J. V. Oldham.
Farmers	Rowan	668	11	74.8	+ 3.6	95	14	52	30	35	...	...	...	0	....	21	0	9	......	Miss Margaret Carter.
Harlan	Harlan	1197	1	^{i}75.2	......	92^{i}	1†	55^{i}	7	34^{i}	3.80	......	0.80	0	....	9^{i}	11^{i}	1^{i}	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	...	...	...	...	...	...	...	2.87	......	0.85	0	5	...	...	...	...	Jas. L. McCoy.
London	Laurel	1190	4	...	...	...	...	...	...	...	2.92	......	0.70	0	9	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Miss Carrie S. Adams.
Maysville	Mason	524	21	77.8	+ 4.9	96	11†	55	30	36	2.32	−2.01	0.83	0	11	20	6	4	e.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	74.8	+ 2.6	93	17	53	7	29	4.09	−0.45	1.50	0	12	13	17	0	......	B. H. Perkins.
Mount Sterling	Montgomery	930	29	76.2	+ 3.8	94	1†	57	9	31	4.59	−0.54	2.10	0	11	17	8	5	w.	W. R. McKee.
Pikeville	Pike	634	13	...	...	...	...	...	...	...	4.06	−0.25	0.92	0	9	...	...	...	...	I. M. Williams.
Richmond	Madison	926	24	76.2	+ 2.8	93	11	56	29	31	5.46	+1.52	2.00	0	11	16	7	7	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	...	...	...	...	55^{c}	30	......	8.04	......	1.65	0	....	16^{c}	7^{c}	4^{c}	......	P. V. Johnson.
Williamsburg	Whitley	939	21	76.2	+ 2.7	93	21	53	8	33	3.91	−0.64	1.30	0	7	17	5	8	s.	N. C. Jones.
State averages and extremes				76.7	....	103	17	51	29	36	4.00	......	3.49	0	10	14	10	6	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶Covington, Ky.

June 9.—A woman was killed by lightning, which followed the telephone wire into the house, near Paris. Another woman was stunned by lightning in this storm.

June 10.—A hail and windstorm caused considerable damage in Bourbon County. Two tobacco barns were blown down and numerous gardens, considerable tobacco, corn and wheat ruined by hail.

June 11.—Lightning killed a cow and damaged a residence at Hopkinsville.

June 15.—A woman standing in a doorway of her residence at Fern Creek, Jefferson County, was severely stunned by lightning.

June 17.—A man was killed by lightning while walking along the street at Smithland. Lightning struck in several places in Louisville and vicinity. Farm buildings and contents, valued at $30,000 were burned. Two women and two children were stunned when an apartment house was struck. Telephones and street cars were interfered with when lightning struck the wires.

Daily Precipitation for June, 1919.

Stations		Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G			.38	.09	.27		.12	.52		.08	.43								.31				.04	.18	.11		.15					[illegible]
Blandville	M	.03	T	.25	.19			.50	1.56											.68	1.25			.24									[illegible]
Calhoun	G			.17	.73	T	T	.45	.22		.01	T		T		.02		T		T		.03	.36	.12	.29	.08	T	T					[illegible]
Earlington	G				.22	.38		.17		.17			.12									.03		.05	.25	.01	.02	.05					[illegible]
Greenville	G				.92						.45					.12					.09		.15	.15		.20		.50					[illegible]
Henderson	O			.20	.15			.28							.65									.20	1.70				.10				[illegible]
Hopkinsville	C				.22	.34			.10	.31	.19	T	.51								T				.13	.14	.49	.16					[illegible]
Marion	O	.12			.33		T.	.37		T	T	.29		.09		.65						T	T	T		.47	T	.50					[illegible]
Mayfield	M	.34			.92					.27	1.00	.08									.04			.65					.05				[illegible]
Owensboro	O	T		1.45	.05	.20			.25	T		.38			.71				.04	.28	T			1.50	.29	.46		.20	T				[illegible]
Paducah (near)	O	.27	.76	.21	.64		.04	.61	.60			.01		.02			.75				.25		.76	.09									[illegible]
Princeton	G		.18		.22			.43		.29															1.01				.15				2.28
Russellville	G																																
Central Division.																																	
Alpha	C							.55	.20	1.10				.60											.80		.85	.50					[illegible]
Anchorage	O				.03	.07	.03	.67	.41			.01		.03		.05		.26				.08		1.05	1.39	.18	.08	.15					[illegible]
Bardstown	S							.25		.35	.07			.40			.16			.30					2.41	.05	.02	.82	.03				[illegible]
Bowling Green	G					.30			.55	.42		.18								1.02				.09	.30	.08		.12					[illegible]
Brownsville	G			.06	.11	.39			3.49	.12	.09	.03		.04											.41	.04	.02	.37	.09				[illegible]
Burnside	C			.38					.54	.05				.11							.12				1.26	.09		T					[illegible]
Carrollton	O							.60		.01						.56		.02	.01				.02	.01	1.35		.46	.01	.05				3.10
Cloverport	O			T.	.10	.12		.16		T		.04	T	.18	.02				T.		.01	T.		.03	3.25	.05	.01	.06	.01				[illegible]
Edmonton	G																																
Eubank	C			.18						1.80	.10		.12	.10			.14						.20		1.66	.72		.16	.65				4.57
Frankfort	K							.52		.48			.50	1.32			.12		.06					T.	1.00	T	.90	.07					4.97
Franklin	G			.15					T	.31	.14	.03				.30	.03	.05	.06			.41											1.48
Greensburg	G								.65	.12	.29												.32		.56	.36	.49	.42					3.23
High Bridge	K							.05						.47									.05	.10	.82	.34		.13	.25				2.21
Irvington	O				.26			.30	T.				T.	T.								T	T.	T.	3.10	3.25	T.	.46					7.37
Junction City	K		.10		.02		.14	.58		.02												.05		.24	.80	.12	.33	.12	.04				2.56
Lebanon	S																																
Leitchfield	G				.22		.40		.30	.03	T.					T.		.12	T.	.02			.03	.07	.97		.33						2.49
Lexington ***	K						.06	.01	.02			.16	.16			.04	T.	.04			1.44	.12	T.	1.44	.26	.19	.46	.10					4.19
LOUISVILLE***	O				.10		.18	.03	.41			.02	T.			.01	T	.10				.13	T.	2.01	.77	.15	.12	.38					4.41
Do. (Cherokee Park)	O				.73			.33	.64			.02		.09		.02		.15	.04			.68	.03	.69	2.44	.16	.08	.05					6.15
St. John	S	.01			.01	.26		.19	T.								.30				.20			.02	1.25	.03	1.94	1.37					5.58
Scott	L						.15	.25	.20			T.	T.		T	.53	.02	.02						.20	.13	.79	.44	T					[illegible]
Shelbyville	S							.44		.30				.28			.40						1.58	.65	.96		.40	1.30	T.				6.31
Taylorsville	S				T.		.06	.27	.79	T.				.01		.23		.04		T.		.22	T.	.59	.60	.25	.98	.15					4.19
Williamstown	L							.42	.78							.10		.05					.48	.01	.26	.23	.44	.52	.05				[illegible]
Woodbury	G	.15		.22	.06	1.24			1.32		.17	.77		.03				T.	.52	.32				T	.04	.02		.32					5.18
Eastern Division.																																	
Beattyville	K								.90	.21	.41	.02	.18	.12						.02	.02		.18		.97	.58	.60						4.21
Berea	K								.48	.36							T.	T.				.40		1.50	.40	.04		.15	.08				3.41
Catlettsburg	B					.61			.19							.85	.02	.06					.57		.56	.58	.09						3.53
Cynthiana	L					T.		.50		.15			.45	.05		.10	1.30	T	T.		T.		.50		.80	.10	.30	.20	T.				[illegible]
Falmouth	L							.10	.20	.51				.07		.10	.13	.22	.01				.43	.09	.78	.20	2.89						5.64
Farmers	L																																
Harlan	K		.07					.09	.40	.13		.29	.80								.10			*	*	*	*	1.92					3.80
Jackson	K						T.		.45	.15				T		T.		T.			T.		T.	T.	.85	.85	.57		T				2.87
London	C			.50					.60	.40										.15				.12	.70	.30			.05	.10			2.92
Louisa	B																																
Maysville	O							.12		.10							.35	.06	.02				.15		.36	.83	.09	.22	.02				2.32
Middlesboro	C							.08	.39	.05	.35			.08					.15		.02			1.50	.85	.23	.32	.07					4.09
Mount Sterling	L								.11	.05	T.	T.		.22		.93	.10						.35	.05	2.10	.78	.55	.25					4.59
Pikeville	B							T	.92				.76	.24						T.			.06	.12	.52	.48	.82	.14					4.06
Richmond	K								.24	.03					.08			T.	.70			.35	.01	.02	2.00	.28	.40	1.35	T.				5.46
Weeksbury	B							T.	1.65				.59			T.				.66	.49	1.10		1.57	.62	.75	.15	.46					8.04
Williamsburg	C			T.					.75	.19	.50			.29											1.30	.62	.05	T.					3.91

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

June 19.—Two persons were overcome by heat at Louisville. A man and mule were killed by lightning in Ballard County.

June 22.—A man was killed by lightning near Mt. Olivet, Warren County.

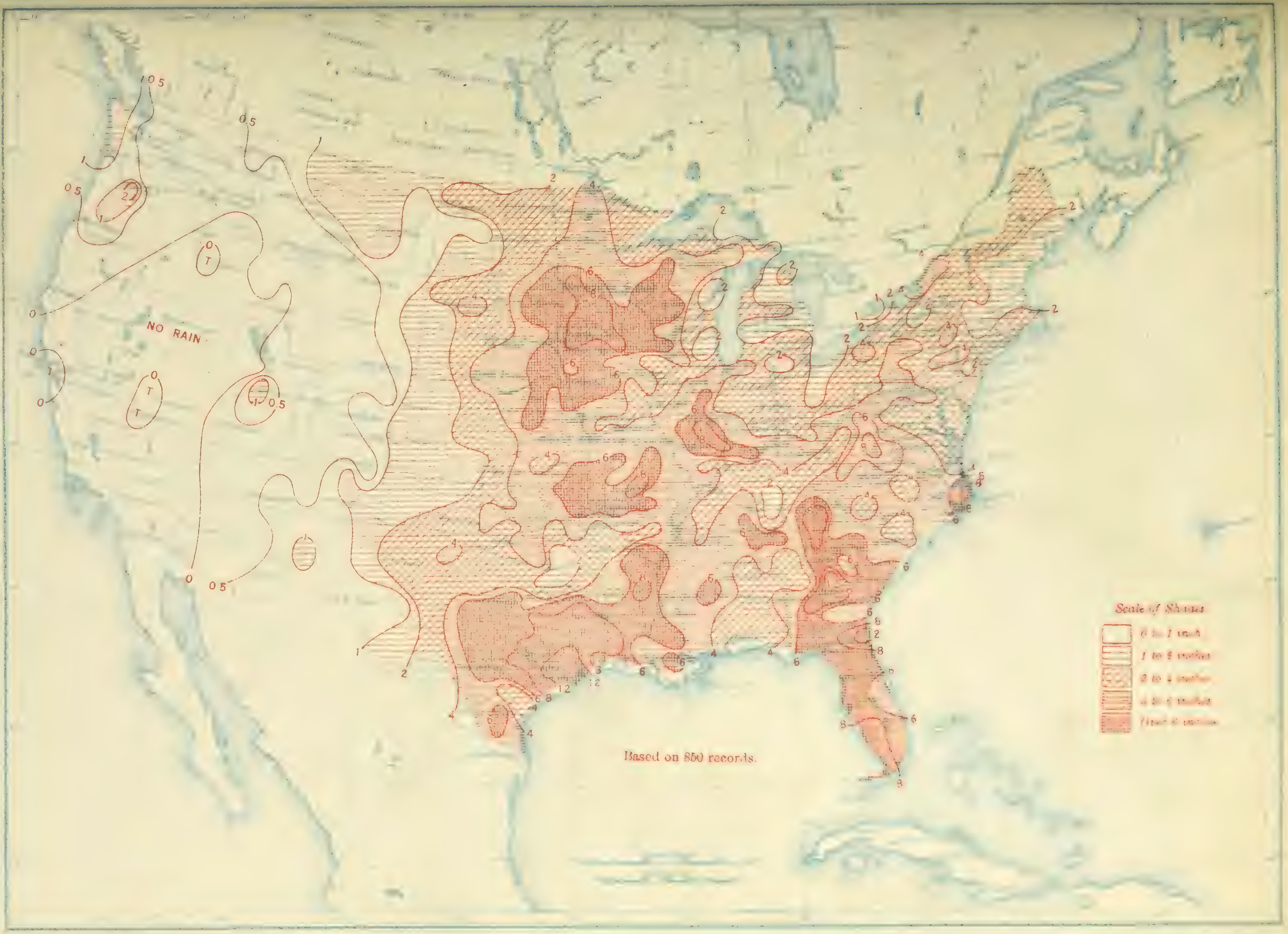
Rivers:—River stages declined sharply during the first week, after which changes were unimportant until the 26th, when a rise began in the Ohio, due to the general rains, and continued in the middle reaches until the end of the month.

Daily temperatures for June, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum...	91	91	87	79	85	84	87	84	84	90	92	95	90	92	93	95	95	94	89	92	92	89	85	91	91	91	88	87	88	90	..	89.4
	Minimum....	67	66	66	65	64	58	62	65	65	65	65	67	69	65	69	68	69	67	69	68	67	71	71	71	68	73	66	64	57	66	..	66.4
Blandville	Maximum...	83	85	81	78	81	84	82	87	90	84	88	87	85	88	89	91	91	91	86	89	87	88	82	85	87	89	88	80	83	86	..	85.8
	Minimum....	67	68	71	63	58	58	61	66	63	65	67	69	70	70	71	72	70	71	70	69	71	72	70	71	74	72	71	66	64	71	..	68.0
Calhoun	Maximum...	89	89	87	81	81	82	82	86	..	88	90	93	90	91	93	93	93	93	89	90	93	89	83	89	88	89	88	81	85	91	..	a88.1
	Minimum....	67	67	65	65	57	66	61	65	..	63	66	66	68	64	69	68	69	68	68	70	67	70	71	70	66	72	67	66	60	68	..	a66.5
Earlington	Maximum...	93	93	89	87	90	90	90	93	88	96	94	96	94	95	96	99	103	99	94	92	96	94	86	93	93	94	93	85	91	93	..	93.0
	Minimum....	67	68	68	65	58	58	62	64	62	64	67	65	69	65	67	68	69	69	70	72	68	70	71	71	69	73	68	68	61	70	..	66.9
Greenville	Maximum...	90	89	87	80	83	87	85	87	82	89	91	92	89	90	93	93	92	92	90	90	91	89	83	88	89	88	92	83	86	89	..	88.3
	Minimum....	65	66	66	65	61	57	61	64	62	62	65	65	65	65	67	67	69	69	67	78	65	68	70	70	67	71	66	66	59	69	..	65.9
Hopkinsville	Maximum...	91	92	86	80	86	87	82	92	84	90	92	91	92	93	94	97	97	95	90	93	94	92	85	90	91	91	90	82	90	92	..	90.0
	Minimum....	67	66	70	65	59	57	62	64	65	65	67	65	69	67	68	68	70	71	69	69	70	72	71	70	69	72	67	69	63	69	..	67.2
Marion	Maximum...	86	88	84	84	80	82	80	85	88	86	88	90	87	89	89	93	93	92	86	90	88	88	79	87	88	89	88	78	86	89	..	86.7
	Minimum....	68	70	67	65	60	59	61	66	62	64	67	69	70	69	69	73	71	70	69	70	70	71	70	71	67	71	71	66	62	71	..	67 6
Mayfield §§	Maximum...	84	86	80	77	80	82	82	86	89	80	85	89	86	90	90	91	91	91	86	86	89	91	84	86	87	90	89	78	84	87	..	85.9
	Minimum....	67	67	68	64	57	57	61	65	64	61	66	62	68	68	68	70	70	70	69	69	70	70	70	69	72	71	69	66	62	69	..	66.6
Owensboro	Maximum...	88	89	86	86	83	82	82	84	82	87	87	89	86	90	91	94	92	92	91	88	88	85	81	89	87	89	86	82	86	90	..	87.1
	Minimum....	68	68	67	66	66	58	58	65	65	65	66	68	70	66	70	70	73	71	68	72	69	71	69	69	67	73	70	66	61	61	..	67 2
Paducah (Lone Oak)	Maximum...	88	87	88	86	89	86	84	90	91	92	94	91	92	94	92	95	94	95	93	94	93	96	94	89	90	92	91	90	89	91	..	91.0
	Minimum....	64	61	62	60	57	59	58	64	66	65	70	67	68	70	72	68	70	71	72	66	64	68	71	72	72	71	69	64	66	69	..	66.5
Princeton §§	Maximum...	90	90	88	81	80	87	80	81	87	90	93	91	92	92	92	95	96	94	90	87	92	..	93	90	90	90	90	..	93	91	..	b89.5
	Minimum....	70	68	71	66	58	55	61	63	65	65	67	64	69	66	66	69	72	70	70	70	69	71	..	69	69	69	71	66	..	70	..	b67.1
Russellville §§	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum...	83	86	83	73	80	78	81	79	78	83	85	85	86	82	80	88	87	85	81	85	81	85	79	80	85	80	85	74	81	80	..	81.7
	Minimum....	67	65	65	60	66	66	70	65	73	70	70	68	66	69	60	71	66	71	70	65	70	70	72	70	74	69	70	70	64	70	..	68.1
Anchorage	Maximum...	91	89	86	87	85	77	82	85	88	90	92	91	90	92	92	93	91	91	90	91	91	83	76	89	81	86	88	77	86	89	..	87.3
	Minimum....	63	63	65	67	62	58	59	59	59	63	65	63	64	63	68	64	65	65	66	64	64	67	64	69	67	69	65	60	55	60	..	63 5
Bardstown	Maximum...	90	89	88	87	85	83	82	84	83	88	91	91	87	91	90	90	90	90	89	92	93	86	78	87	86	85	85	79	85	89	..	87.1
	Minimum....	65	65	67	68	64	59	61	63	62	65	68	67	66	66	69	66	69	68	70	67	69	70	70	70	71	70	67	63	62	62	..	66.3
Bowling Green	Maximum...	94	95	86	88	90	90	89	88	83	93	95	97	93	94	95	97	97	97	89	94	94	94	86	93	94	91	92	80	91	94	..	91.8
	Minimum....	65	67	67	67	65	60	66	64	65	66	65	67	67	69	71	68	69	69	68	69	68	71	71	71	71	71	67	67	61	69	..	67.4
Edmonton	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Eubank	Maximum...	89	90	86	82	85	83	83	82	80	88	90	88	87	90	88	88	88	89	89	90	89	85	80	83	85	81	84	74	84	84	..	85.5
	Minimum....	62	63	65	65	59	57	58	60	60	62	66	65	64	61	65	64	64	66	65	66	64	66	69	67	72	67	64	63	58	61	..	63 6
Frankfort	Maximum...	91	90	90	87	86	85	83	87	86	89	93	92	91	90	90	89	89	90	91	92	90	82	82	87	87	87	85	83	85	88	..	87.9
	Minimum....	64	65	66	67	65	61	63	63	60	66	68	67	66	67	70	67	68	68	71	69	70	71	67	70	74	69	69	63	60	60	..	66.5
Franklin	Maximum...	89	85	83	87	86	86	87	91	83	90	91	92	90	92	93	91	94	94	87	92	93	95	86	89	91	91	89	80	90	91	..	89.3
	Minimum....	67	68	70	68	66	60	65	64	65	65	64	68	71	67	69	67	68	70	68	68	78	69	71	70	74	71	67	68	62	71	..	68.0
Greensburg	Maximum...	88	90	86	85	84	82	83	84	80	87	89	88	87	91	90	92	93	92	88	90	91	87	84	86	87	83	84	77	85	85	..	86.6
	Minimum....	64	68	63	62	62	57	59	60	63	63	64	65	64	64	66	65	65	67	66	63	64	67	69	69	67	68	65	63	55	64	..	64 0
Irvington	Maximum...	89	88	87	82	83	82	81	86	85	88	90	91	88	89	90	91	90	91	90	89	88	85	82	87	87	86	86	76	84	88	..	86.6
	Minimum....	67	68	68	69	67	62	63	65	65	66	68	68	72	66	66	68	69	68	69	70	67	71	69	72	67	72	69	64	59	67	..	67.4
Junction City	Maximum...	90	90	85	82	84	81	81	82	85	88	90	90	90	90	89	91	91	92	90	92	93	92	83	87	85	84	87	79	89	88	..	87.7
	Minimum....	62	62	61	61	57	56	59	62	60	62	66	64	65	62	65	64	63	64	66	65	63	67	67	76	68	68	64	62	54	55	..	63.0
Lebanon	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Leitchfield	Maximum...	89	90	85	79	84	83	82	82	84	87	89	90	85	90	90	91	91	91	87	89	89	87	81	87	87	85	87	76	86	88	..	86.4
	Minimum....	66	65	68	67	65	60	61	62	65	65	66	68	69	67	70	67	69	69	68	68	66	70	71	71	69	69	68	64	58	65	..	66.5
Lexington	Maximum...	91	89	86	84	84	81	79	80	85	90	93	91	89	88	89	88	87	90	90	87	87	80	73	84	84	81	82	74	83	85	..	85.1
	Minimum....	71	74	72	70	68	63	62	65	64	70	71	69	67	73	68	67	70	68	70	66	69	68	65	67	72	68	66	61	59	64	..	67.6
Louisville	Maximum...	92	90	87	86	85	82	81	84	88	88	90	90	88	90	91	92	90	91	88	89	91	83	75	87	81	86	85	78	85	89	..	86.7
	Minimum....	70	73	72	71	68	63	62	65	64	70	72	70	69	70	72	71	71	70	71	73	72	72	68	71	69	73	68	63	58	66	..	68.9
Do. (Cherokee Park)	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum....	65	66	66	69	67	63	61	63	61	63	68	68	68	67	70	68	69	68	70	69	69	70	67	71	69	71	69	63	58	62	..	66.6
St. John	Maximum...	88	89	86	83	83	82	82	85	86	87	91	92	89	92	91	90	91	91	88	90	92	86	80	88	86	84	85	77	84	89	..	86.9
	Minimum....	65	64	65	69	65	59	60	61	64	64	65	66	68	64	68	65	67	68	67	68	65	70	68	71	64	68	67	63	57	63	..	65.3
Scott	Maximum...	91	92	87	87	83	80	78	78	86	89	90	92	88	92	88	85	84	90	89	90	89	80	75	87	83	83	83	77	83	86	..	85.5
	Minimum....	64	67	68	68	67	60	59	60	59	66	66	67	66	66	67	66	65	64	70	69	67	69	62	68	67	68	67	57	54	59	..	64.7
Shelbyville	Maximum...	93	91	88	85	87	79	80	85	89	90	94	93	91	93	92	93	93	94	93	93	92	82	75	87	85	86	86	79	85	90	..	88.1
	Minimum....	62	64	66	67	62	56	59	60	57	64	65	65	64	64	67	64	65	65	67	64	67	66	65	66	67	67	64	60	54	59	..	63.4
Taylorsville	Maximum...	89	88	86	83	87	84	84	84	85	88	88	91	89	90	89	89	88	90	91	92	91	83	78	89	83	85	83	77	84	88	..	86.5
	Minimum....	63	64	66	68	62	58	61	61	59	64	66	65	66	65	58	64	66	66	68	64	69	70	68	69	70	68	65	63	55	60	..	64.7
Williamstown	Maximum...	91	91	88	88	84	84	80	78	87	90	92	98	89	92	90	88	89	92	90	92	90	78	76	86	84	82	86	79	84	86	..	86.8
	Minimum....	67	72	66	67	67	62	60	60	60	67	68	68	68	68	67	66	66	67	70	70	69	68	62	68	68	68	67	60	56	60	..	65.7
Eastern Division																																	
Beattyville	Maximum...	93	92	85	87	90	88	89	83	87	92	94	92	91	93	88	92	91	91	95	95	94	85	74	88	90	87	87	79	85	86	..	88.8
	Minimum....	61	69	63	60	64	60	56	60	57	63	63	63	63	63	63	71	65	65	64	66	64	66	65	67	76	66	67	66	51	56	..	63.4
Berea	Maximum...	91	92	86	87	87	85	85	82	85	90	93	91	94	93	90	92	92	91	92	93	94	87	77	86	88	94	86	78	85	83	..	88.3
	Minimum....	66	79	69	69	69	73	60	66	61	62	66	66	64	62	67	64	62	65	67	66	62	67	67	67	73	70	66	63	59	60	..	65.9
Farmers	Maximum...	92	93	92	88	88	86	84	82	89	92	93	93	92	95	84	90	92	94	94	94	91	82	82	82	76	84	90	91	90	84	..	88.6
	Minimum....	57	57	62	60	64	56	56	57	54	57	60	60	61	59	58	63	64	62	64	63	65	65	63	68	69	69	63	64	54	52	..	60.9
Harlan	Maximum...	94	92	89	87	87	87	86	78	85	88	87	90	87	88	88	89	90	90	92	90	91	..	..	..	..	..	..	..	..	..	..	i88.2
	Minimum....	58	62	61	60	60	62	55	58	58	62	63	64	62	64	67	68	66	63	64	66	66	..	..	..	..	..	..	..	..	..	..	i62.3
Maysville	Maximum...	95	95	92	90	93	90	86	87	93	93	96	94	94	96	92	92	91	93	96	95	94	87	75	90	88	89	88	81	85	88	..	90.6
	Minimum....	60	65	63	63	66	63	62	59	57	65	65	65	66	65	68	67	66	67	71	69	69	67	65	69	74	76	67	63	56	55		65.1
Middlesboro	Maximum...	89	91	87	86	83	89	89	77	83	90	90	89	88	89	90	91	93	90	91	92	91	90	86	78	84	85	85	80	85	85	..	87.2
	Minimum....	57	60	61	64	57	57	53	60	59	61	63	62	62	64	64	62	64	65	65	69	64	65	66	67	67	67	67	66	61	57	..	62.5
Mount Sterling	Maximum...	94	94	87	88	88	83	87	83	88	93	94	93	90	89	92	90	91	91	94	94	91	84	77	88	84	85	85	80	82	83	..	88.1
	Minimum....	66	66	70	70	64	61	58	62	57	61	63	64	63	63	65	67	64	65	67	66	66	65	63	67	68	70	66	62	58	59	..	64.2
Richmond	Maximum...	92	92	88	87	87	84	83	83	87	92	93	92	89	91	91	92	91	92	92	91	88	83	73	85	86	85	85	76	87	88	..	87.5
	Minimum....	64	69	67	65	63	61	60	63	59	64	67	65	64	65	67	66	65	65	67	69	66	67	66	66	71	69	66	62	56	60	..	64.8
Weeksbury	Maximum...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
	Minimum....	59	60	58	58	62	62	58	58	58	58	64	64	61	60	62	64	67	64	61	65	65	..	67	67	67	67	68	..	..	55	..	c62.2
Williamsburg	Maximum...	91	91	88	87	87	87	89	86	83	89	92	92	89	90	90	91	92	92	91	92	93	91	88	88	88	88	86	87	86	86	..	89.0
	Minimum....	60	61	60	62	59	60	56	53	61	62	63	64	63	64	62	66	65	65	63	65	66	67	66	69	76	70	65	65	64	56	..	63.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


NO RAIN
0.5
1
2
4
6
8
12
T
0
Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
Based on 850 records.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

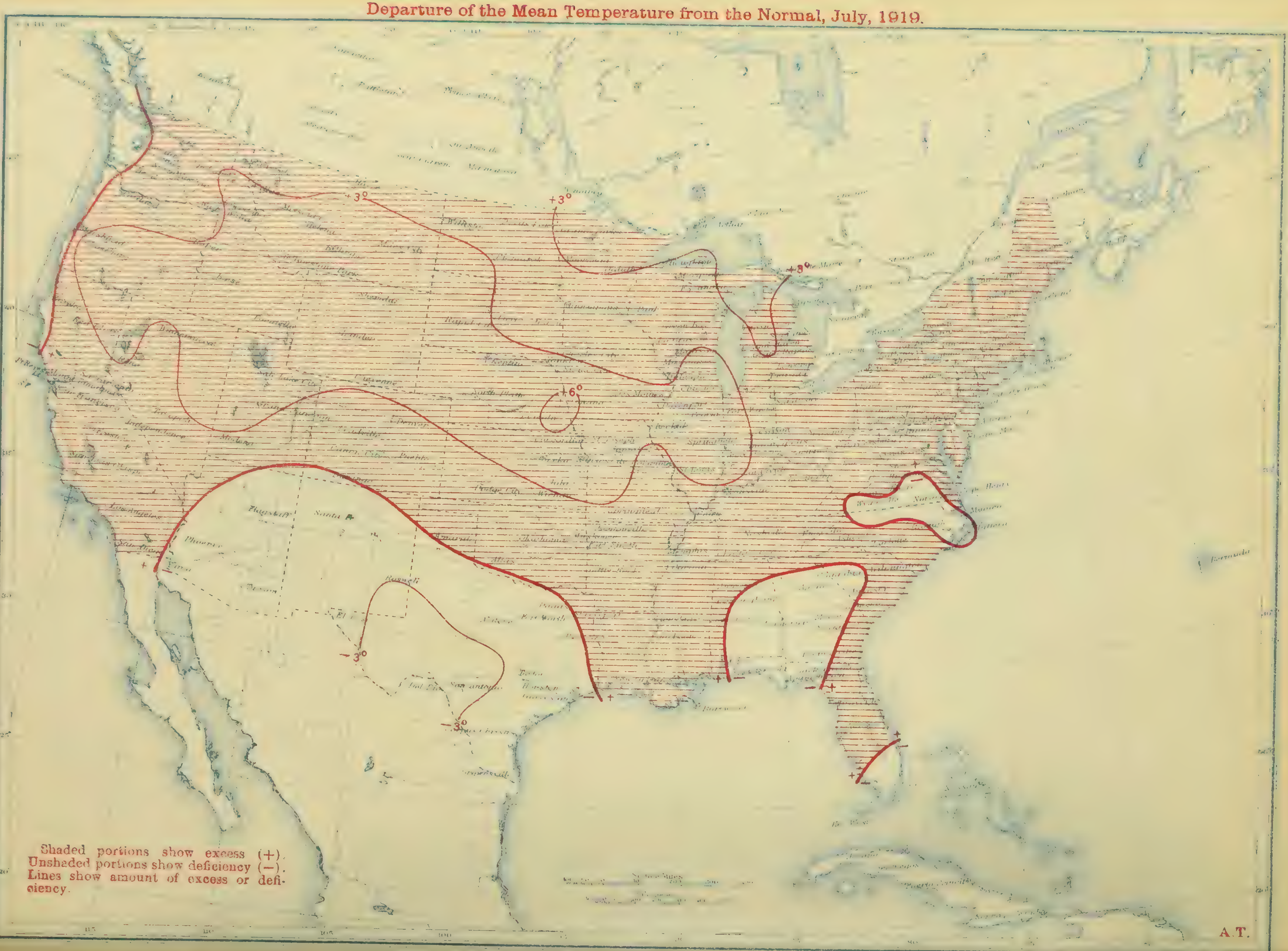
KENTUCKY SECTION

JULY, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 30, 1919.

Departure of the Mean Temperature from the Normal, July, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., JULY, 1919. No. 7

GENERAL SUMMARY.

Although temperature records were not broken, the month was remarkable for the persistent high maximum temperatures, ranging between 90° and 100° in some part of the State every day in the month. Only twice since State records were established has the July average temperature been higher, viz., in 1901 and 1913. The high temperature, abundant sunshine, and light rainfall were favorable for threshing, hay harvest, and cultivation of crops; but precipitation was not sufficient to keep vegetation in good growing condition. The rainfall was not well distributed, a few localities receiving nearly the normal amount, while in other districts only one or two light showers occurred during the month. In such places the growing crops were seriously injured by the drought. Tobacco, and early corn on uplands, began to deteriorate or "fire" toward the end of the month. The growth of late corn was checked, although it was not otherwise injured; while late tobacco grew slowly and developed unevenly from lack of moisture. The dry weather contributed to the saving of an unusually large crop of blackberries, which were the more appreciated on account of the scarcity of other fruit. The month ended with crops in a good state of cultivation and farm work generally up to the seasonal average, but with the need for moisture becoming urgent in most localities.

PRESSURE.

Two well defined low pressure areas passed north of this section, on the 9-10th and 14-15th, causing fairly general rains in this State; otherwise the "lows" were scarcely more than shallow troughs between the "highs", and of feeble influence in producing rain. High pressure areas were dominant during most of the month, lying much of the time to the south or southeast of the section.

The mean sea-level pressure based on the reports of two stations, was 30.02 inches. The extremes were 30.27 inches at Lexington on on the 1st, and 29.83 inches at Louisville on the 10th.

PRECIPITATION.

The average temperature of the State, 37 stations reporting, was 79.5°, which is 2.8° above normal. Maximum temperatures of 90° or higher were registered on every day in the month at Earlington and on every day but one at Bowling Green, while at many other stations there were only a few days with temperature maxima below 90°. The extremes were 104° at Earlington on the 29th and 50° at Junction City on the 1st.

TEMPERATURE.

Precipitation for the State, based on the reports of 51 stations, was 2.10 inches, which is 2.20 inches less than normal. Monthly amounts of three to four inches occurred in the south-central counties, in the lower Licking basin, in Jefferson County, and in the extreme eastern mountain counties. Over the greater portion of the State amounts ranged between 1.00 and 2.50 inches; but there were extensive areas in the central and western portions that received less than 1.00 inch. Rains were not general, but occurred mostly in the form of local thunderstorms. Moderate to heavy rains fell at many stations on the 10th, and 15 16th; and there were good rains in most of the central counties in the period 29th-31st.

WIND.

The total wind movement at Louisville was 6,747 miles, and at Lexington 7,636 miles, with average hourly velocities of 9.1 and 10.3 miles, respectively. The maximum velocity for five minutes was at the rate of 56 miles from the north on the 31st at Louisville, and 48 miles from the south on the 5th at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 76 per cent, at 12 noon 52 per cent, and at 7 p. m. 55 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 86 and at Lexington 72. This is the highest on record for July at Louisville.

MISCELLANEOUS

July 7.—A farmer was killed by lightning while working in the field in McCracken County.

July 15.—Some damage was caused by a local wind and rainstorm in Jefferson County. Two persons were severely and one slightly shocked by lightning in Louisville. In one case a street car was struck, rendering the motorman unconscious.

July 19.—Corn and tobacco were practically destroyed by hail in a limited area in Boyle County.

July 29.—One person was killed and another seriously injured by lightning near Lexington. Lightning caused the burning of several buildings near Pleasure Ridge Park, Jefferson County.

Rivers:—The Ohio declined to comparatively low stages during the first week and, except for a slight swell near the middle of the month, it continued at moderate to low stages. Very little change occurred in the other streams of the State.

COMPARATIVE DATA FOR JULY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in or more.
1889	75.1	−1.6	98	50	5.62	+1.32	..
1890	73.0	−3.7	101	44	2.66	−1.64	..
1891	74.0	−2.7	91	47	4.08	−0.22	..
1892	76.5	−0.2	100	48	3.30	−1.00	..
1893	78.8	+2.1	101	50	3.48	−0.82	..
1894	76.2	−0.5	105	43	2.03	−2.27	..
1895	75.2	−1.5	99	49	5.75	+1.45	9
1896	77.4	+0.7	103	47	7.44	+3.14	11
1897	77.8	+1.1	107	50	4.79	+0.49	10
1898	77.8	+1.1	102	48	4.71	+0.41	11
1899	77.3	+0.6	100	47	3.78	−0.52	9
1900	77.9	+1.2	101	50	4.91	+0.61	11
1901	81.7	+5.0	112	48	1.72	−2.58	5
1902	78.1	+1.4	107	48	1.91	−2.39	6
1903	77.5	+0.8	104	49	3.53	−0.77	8
1904	75.2	−1.5	99	46	3.40	−0.90	10
1905	75.9	−0.8	102	52	5.93	+1.63	13
1906	75.2	−1.5	100	51	6.02	+1.72	11
1907	78.1	+1.4	102	40	4.71	+0.41	9
1908	76.9	+0.2	100	50	3.94	−0.36	10
1909	74.8	−1.9	99	48	6.01	+1.71	11
1910	76.2	−0.5	96	51	8.63	+4.33	16
1911	75.8	−0.9	105	42	2.28	−2.02	7
1912	76.8	+0.1	100	53	5.50	+1.20	12
1913	79.9	+3.2	109	48	2.54	−1.76	7
1914	78.8	+2.1	109	43	3.20	−1.10	6
1915	75.7	−1.0	102	49	5.30	+1.00	11
1916	78.6	+1.9	102	52	4.17	−0.13	9
1917	75.3	−1.4	100	50	4.38	+0.08	11
1918	73.8	−2.9	103	46	3.28	−1.02	8
1919	79.5	+2.8	104	50	2.10	−2.20	5

Climatological data for July, 1919.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	80.8	+3.2	100	13†	56	17	40	0.80	−3.59	0.64	0	3	28	3	0	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	80.0	+2.1	95	21†	60	17	30	1.36	−2.53	0.53	0	4	15	15	1	sw.	E. W. Horr.
Calhoun	McLean	437	15	80.6	+2.8	101	29	57	17	37	1.07	−3.52	0.26	0	6	11	20	0	sw.	W. A. Taylor.
Earlington	Hopkins	420	28	82.9	+4.5	104	29	55	17	42	0.65	−3.45	0.30	0	6	28	2	1	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	80.6	....	103	25	57	17	42	1.75	....	1.00	0	2	27	4	0	w.	C. R. Lovell.
Henderson	Henderson	327	11	....	....	....	....	....	....	....	0.17	−3.59	0.12	0	2	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	22	81.8	+3.0	100	3†	58	17	35	3.38	−0.65	2.62	0	4	19	10	2	se.	W. E. Graves.
Marion	Crittenden	571	20	80.6	+2.8	98	24†	58	17	30	0.97	−2.96	0.58	0	3	17	13	1	s.	B. C. Paris.
Mayfield	Graves	364	9	80.0	+2.4	98	21†	56	17	35	0.84	−3.81	0.82	0	2	10	18	3	ne.	J. N. Davis.
Owensboro	Daviess	479	22	79.5	+1.5	97	29	61	16	32	1 73	−2.12	0.89	0	5	21	7	3	s.	Henry S. Berry.
Paducah (near)	McCracken	341	19	82.6	+1.6	101	13†	57	17	36	1.77	−2.27	0.88	0	4	26	5	0	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	[b]80.4	+1.8	100[b]	29	59[b]	17	39[b]	3.12	−0.29	1.53	0	7	21[b]	0[b]	5[b]	n.	Ray Baker.
Russellville	Logan	590	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	E. C. Shelton.
Central Division.																				
Alpha	Clinton	811	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	W. W. Hicks.
Anchorage	Jefferson	700	18	78.6	+2.5	97	3†	58	17†	36	2.18	−2.32	0.89	0	5	24	7	0	sw.	C. E. Barret.
Bardstown	Nelson	637	22	79.4	+0.9	98	13	60	17†	35	1.25	−3.23	0.65	0	4	27	0	4	s.	Chas. M. Talbott.
Bowling Green	Warren	500	28	82.8	+3.9	103	13†	59	17	36	1.36	−3.10	0.70	0	4	16	15	0	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	....	....	....	....	....	....	....	2.59	....	1.04	0	6	....	....	....	....	James H. Young.
Burnside	Pulaski	773	26	....	....	....	....	....	....	....	3.76	−1.17	1.35	0	5	....	....	....	....	F. E. Bradshaw.
Carrollton	Carroll	492	20	....	....	....	....	....	....	....	1.37	−2.03	0.80	0	4	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	5	....	....	....	....	....	....	....	1.60	....	1.10	0	3	....	....	....	....	W. A. Cockerill.
Edmonton	Metcalfe	600	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Eubank	Pulaski	1177	24	76.8	+2.1	95	14	57	2†	35	3.34	−1.29	1.95	0	4	13	8	10	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	79.6	+2.7	97	14	59	17	33	2.12	−1.99	0.96	0	3	18	7	6	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	82.5	+5.0	102	14	58	17	36	4.67	+0.56	1.75	0	9	17	11	3	sw.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	78.0	+1.6	97	13†	54	17	35	0.91	−3.68	0.58	0	5	9	6	15	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	....	....	....	....	....	....	....	2.35	−2.17	0.97	0	7	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	21	79.5	+2.1	95	13†	59	1	30	2.93	−0.62	1.40	0	4	27	3	1	sw.	W. J. Piggott.
Junction City	Boyle	985	25	77.6	+2.6	96	14	50	1	38	3.42	−0.81	0.55	0	10	19	10	2	se.	Prof. E. L. Grubbs.
Lebanon	Marion	754	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Leitchfield	Grayson	635	23	79.4	+1.8	97	12†	60	17†	35	1.85	−2.29	1.01	0	6	24	6	1	sw.	John E. Stone.
Lexington	Fayette	989	31	78.8	+2.2	94	14	61	17	26	2.28	−2.16	0.71	0	8	15	12	4	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	80.3	+1.7	97	13	62	16	28	3.47	−0.27	1.69	0	5	20	9	2	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	9	....	....	....	....	59	17	....	2.94	−2.68	1.47	0	4	22	7	2	s.	Wm. I. Hunt.
St. John	Hardin	777	22	79.0	+3.3	99	29	57	17	36	0.66	−2.89	0.51	0	3	26	3	2	....	Sisters of Loretto.
Scott ¶	Kenton	900	21	77.1	+0.5	97	3	56	11	36	3.16	−0.18	2.22	0	6	16	13	2	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	78.8	+1.9	100	30	54	11	40	1.42	−2.68	1.30	0	2	22	6	3	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	78.0	+1.7	97	13	57	17†	36	2.88	−1.76	1.75	0	5	23	2	6	sw.	E. D. Bourne.
Williamstown	Grant	943	16	79.2	+3.6	98	2	55	11	34	1.43	−2.63	0.78	0	6	11	19	1	....	Miss Rose Carter.
Woodbury	Butler	533	1	....	....	....	....	....	....	....	1.88	....	1.41	0	3	....	....	....	....	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	78.8	+3.4	100	14†	53	1	37	2.00	−3.03	0.90	0	5	15	14	2	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	78.9	+2.5	97	14†	60	3†	37	2.39	....	1.04	0	5	20	6	5	sw.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	....	....	....	....	....	....	....	1.48	−2.72	0.65	0	5	....	....	....	....	Forester Farley.
Cynthiana	Harrison	684	1	....	....	....	....	....	....	....	3.05	....	1.80	0	4	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	30	....	....	....	....	....	....	....	4.04	+0.29	2.35	0	5	22	4	5	e.	J. V. Oldham.
Farmers	Rowan	668	11	78.6	+3.7	99	15	53	17	38	....	....	....	0	....	23	6	2	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	77.8	....	96	4†	52	1	39	2.55	....	0.98	0	10	16	10	5	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	....	....	....	....	....	....	....	0.20	−3.83	0.20	0	1	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	4	....	....	....	....	....	....	....	1.70	....	0.80	0	5	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	21	79.6	+2.6	101	14	55	11	40	1.86	−2.68	0.65	0	5	25	4	2	s.	J. C.. Armstrong.
Middlesboro	Bell	1128	21	77.8	+3.1	96	13†	53	1	33	3.16	−2.34	1.80	0	9	21	10	0	....	B. H. Perkins.
Mount Sterling	Montgomery	930	29	77.8	+2.0	99	16	57	2	35	2.88	−2.18	2.05	0	7	24	5	2	w.	W. R. McKee.
Pikeville	Pike	634	13	....	....	....	....	....	....	....	3.42	0.57	1.48	0	4	....	....	....	....	I. M. Williams.
Richmond	Madison	926	24	79.0	+2.1	97	14	58	17	31	0.40	−3.47	0.22	0	3	24	6	1	....	J. W. Crooke.
Weeksbury	Floyd	1216	4	....	....	....	....	....	....	....	3.17	....	2.60	0	3	....	....	....	....	P. V. Johnson.
Williamsburg	Whitley	939	21	78.8	+2.0	98	14	58	1†	36	1 36	−4.51	0.55	0	5	17	8	6	s.	N. C. Jones.
State averages and extremes			....	79.5	....	104	29	50	1	42	2.10	....	2.62	0	5	20	8	3	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, [a], [b], [c], appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for July, 1919.

Stations.	Day of month																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam ‖ G						.11		.05								.61																[illegible]
Blandville M				.09		.34					.40				.53																	[illegible]
Calhoun G				.14		.21				.26		.01			.24	T														.21	T.	1.07
Earlington ‖ G					.04	T	.05			.04		.14				.08														.30		0.65
Greenville G				1.00											.75																	1.75
Henderson ‖ O							.05			.12					T.																	0.17
Hopkinsville ‖ C							T.			.06		.61				2.62															.09	3.38
Marion O				.58					.23		.16				T.															T.		0.97
Mayfield ‖ M						.02						.82																				0.84
Owensboro ‖ O					T.	.58	.89			T.						.21													.02	.03		1.73
Paducah (near) O						.24			.02		.63				.88																	1.77
Princeton ‖ G				.78		.01				.02		1.53			.30				.02												.46	3.12
Russellville ‖ G																																
Central Division.																																
Alpha C																																
Anchorage O										.89			T.	.12	.83					T.									.10		.24	2.18
Bardstown ‖ S										.65						.32													.23	.05		1.25
Bowling Green ‖ G							T.		.48			T.				.70							.08						.10		T.	1.36
Brownsville ‖ G							.91		.05						.02	1.04												.03		.54		2.59
Burnside ‖ C						.50				1.35						.54			.49											.88		3.76
Carrollton ‖ O										.80						.50				.04	.03											1.37
Cloverport ‖ O					T.	.13	T.			.37					T.	1.10					T.								T.	T	T.	1.60
Edmonton G																																
Eubank ‖ C											1.02					.17			.20											1.95		3.34
Frankfort ‖ K										.96						.55														.11		2.12
Franklin G								.25			.05				.73				.23	.20	.20								.80	1.75	.16	4.67
Greensburg ‖ G										.01	T.				T.	.26			T.	.58									T.	.03	.03	0.91
High Bridge ‖ K										.58	.08				.09	.50			.97										.08	.05		2.35
Irvington O															.47						T.								1.40	.07	.99	2.93
Junction City K							.44			.42					.48	.55		.55	.03							T.		.28	.42	.18	.07	3.42
Lebanon S																																
Leitchfield G				.05				.23			.05				.46						T.							T.	.05		1.01	1.85
Lexington *** K					.71					.59				.02	.08				.01									.01	.35		.51	2.28
LOUISVILLE*** O						.24				1.34				T.	1.69				T.	T.									.05		.15	3.47
Do. (Cherokee Park) O						.13				1.47					1.01					T.									.33			2.94
St. John ‖ S										T.						0.51					.03									.12		0.66
Scott L						T.				2.22					.36				.01	.29	.10										.18	3.16
Shelbyville ‖ S										1.30						.12				T.	T.											1.42
Taylorsville S										1.75				T.	.50	.05				T.									.42		.16	2.88
Williamstown ‖ L					.03					.78					.27	.10			.05	.10												1.33
Woodbury ‖ G					.32				.15							1.41																1.88
Eastern Division.																																
Beattyville ‖ K										.90	.08									.70									.06	.26		2.00
Berea K						.46			.02	.22								T.										T.	.65		1.04	2.39
Catlettsburg ‖ B							.65			.40	.02		.36			.05																1.48
Cynthiana ‖ L										1.80					.50	.40				.35	T.											3.05
Falmouth ‖ L						1.15				2.35	.06					.44					.04											4.04
Farmers L																																
Harlan K			.04			.39		.04		.10	.21				.20	.33		.98	.25	.01												2.55
Jackson ‖ K							T.		T.	T.	T.					T.				T.		T.						T.	T.	.20		0.20
London ‖ C											.80					.30				.24		.06								.30		1.70
Louisa ‖ B																																
Maysville ‖ O										.65	.07				.35	.62					.17											1.86
Middlesboro C						.81	.03	1.80	.11						.02	.02			.16		.08										.13	3.16
Mount Sterling ‖ L							2.05			.27	.06					.28				.06									.10	.06		2.88
Pikeville ‖ B									1.18							1.48			T.	T.			.04							.72		3.42
Richmond ‖ K					T.					.15					.03															.22		0.40
Weeksbury B																2.60													.48		.09	3.17
Williamsburg ‖ C							T.	.55	.12		T.					.22			T.	.05				T.			T.			.42		1.36

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

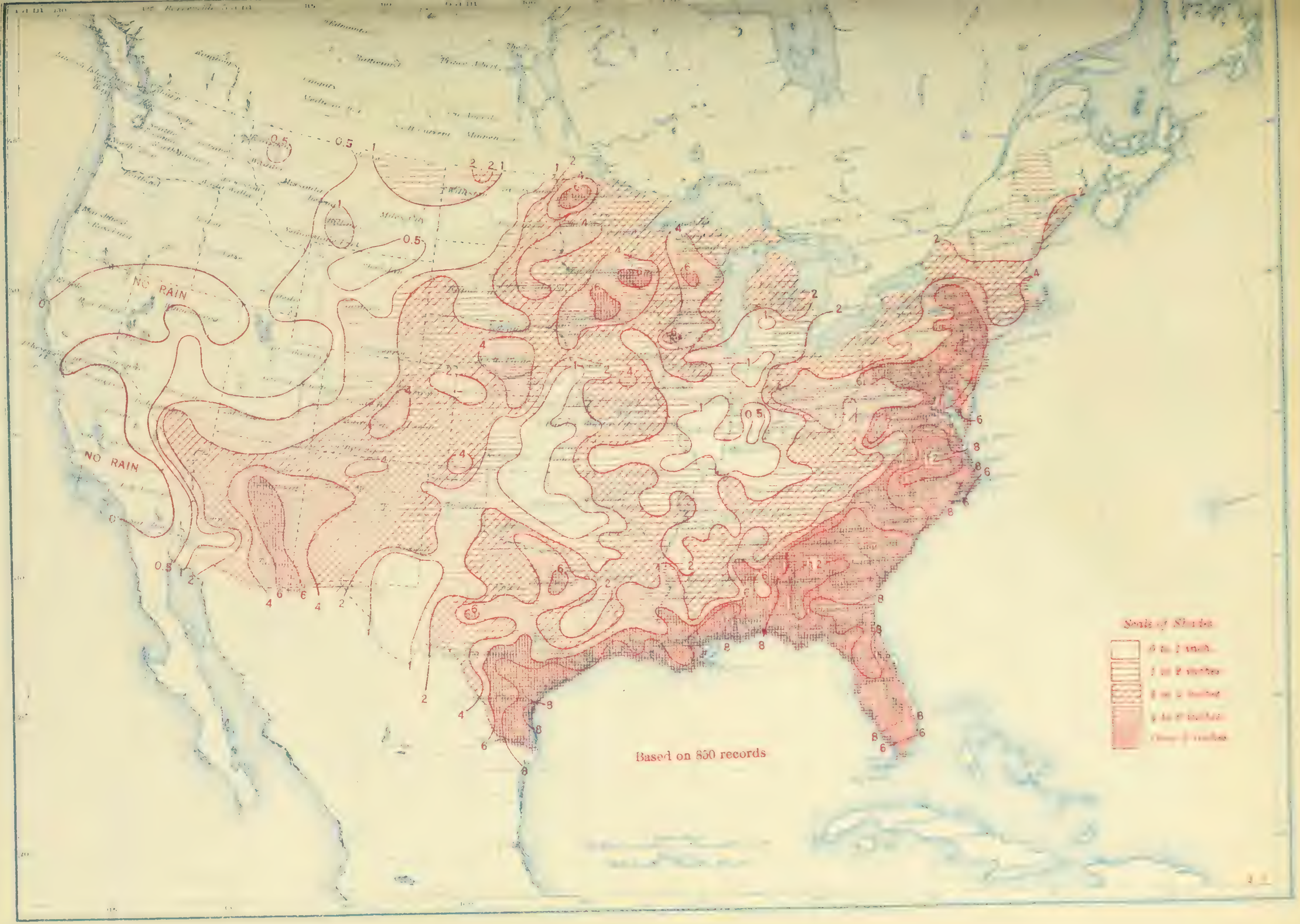
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for July, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	92	94	96	97	97	89	89	92	92	97	89	99	100	97	87	86	88	92	94	93	97	98	95	97	97	94	97	98	100	99	100	94.6
	Minimum	66	66	64	68	65	70	69	66	70	72	61	65	74	69	74	62	56	61	65	65	65	65	65	57	61	70	72	72	76	69	73	66.9
Blandville	Maximum	88	89	92	93	92	84	88	90	91	88	89	94	92	92	87	84	85	90	90	92	95	90	93	95	94	88	88	92	95	95	94	90.6
	Minimum	68	66	68	69	69	69	69	66	73	73	69	67	74	74	73	67	60	63	69	69	69	71	69	65	67	71	73	73	72	74	75	69.5
Calhoun	Maximum	93	94	96	95	95	90	89	91	93	89	87	98	100	96	93	85	87	92	94	93	98	95	95	97	98	94	95	97	101	99	96	94.0
	Minimum	66	69	66	68	65	70	69	68	68	62	63	66	75	71	73	69	57	62	65	65	65	65	65	60	62	68	71	71	74	69	72	67.1
Earlington	Maximum	95	98	100	98	101	93	93	95	96	95	94	100	102	101	92	90	94	95	98	97	102	100	99	102	101	96	97	101	104	98	101	97.7
	Minimum	65	67	65	67	64	73	67	67	72	72	64	68	77	74	73	63	55	60	68	67	66	67	67	60	61	72	74	73	75	72	75	68.1
Greenville	Maximum	90	92	95	96	96	91	87	91	93	89	90	96	96	95	91	93	86	91	92	92	97	97	98	96	103	100	96	96	99	100	97	94.2
	Minimum	65	66	65	67	65	69	69	67	69	70	65	66	75	70	73	62	57	63	65	65	64	65	68	60	61	69	73	71	72	69	72	67.0
Hopkinsville	Maximum	93	96	100	100	99	90	91	95	95	93	95	98	100	98	87	86	89	93	92	94	97	97	95	98	97	92	97	97	100	96	97	95.1
	Minimum	65	65	65	67	67	70	70	68	71	71	66	68	75	71	72	65	58	64	68	68	66	67	71	65	65	71	72	72	73	74	72	68.5
Marion	Maximum	89	92	95	93	95	89	87	88	91	89	80	93	93	92	88	84	88	93	95	93	98	90	95	98	86	96	92	94	98	95	97	91.8
	Minimum	74	70	69	68	67	72	68	66	70	70	70	70	65	74	73	62	58	63	69	67	70	70	68	69	72	70	73	72	73	73	75	69.4
Mayfield §§	Maximum	88	90	95	96	95	87	89	92	92	91	93	93	93	92	91	84	85	91	92	95	98	94	94	98	96	91	91	95	98	98	98	92.7
	Minimum	65	64	65	66	66	70	68	63	66	71	67	66	71	72	74	68	56	62	66	68	66	66	66	63	63	66	70	72	73	73	72	67.2
Owensboro	Maximum	89	92	93	92	93	86	85	88	88	86	83	95	94	91	84	84	87	91	92	93	93	90	92	93	92	91	92	92	97	95	95	90.6
	Minimum	69	70	68	72	66	71	70	70	68	70	66	67	76	72	74	61	62	65	66	67	65	66	66	61	61	70	70	72	75	71	73	68.4
Paducah (Lone Oak)	Maximum	91	93	96	97	98	99	87	91	94	96	98	100	101	99	96	89	86	97	98	97	98	99	100	99	100	96	95	99	99	101	100	96.4
	Minimum	74	72	70	68	70	71	68	64	72	70	66	75	76	74	72	60	57	62	62	64	68	69	71	70	64	66	65	73	71	72	73	68.7
Princeton §§	Maximum	92	94	98	98	97	89	89	91	91	91	92	..	97	97	89	85	89	93	..	94	98	93	95	99	98	96	96	97	100	96	97	[b]94.2
	Minimum	66	64	65	66	65	65	70	68	68	70	68	67	..	71	72	64	59	60	66	..	64	64	65	60	61	70	70	70	71	72	70	[b]66.6
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	89	92	97	94	95	89	86	90	91	87	83	95	96	96	89	83	85	91	92	86	92	93	92	94	95	93	94	94	96	97	95	91.6
	Minimum	61	65	61	63	69	69	66	66	67	66	65	60	81	78	69	59	58	62	64	63	65	62	62	58	62	66	66	69	71	66	70	65.5
Bardstown	Maximum	90	92	94	94	95	88	88	90	91	91	83	95	98	98	93	80	84	91	92	90	94	96	90	95	94	95	94	91	91	96	96	91.9
	Minimum	64	62	62	66	71	70	68	71	69	69	62	62	78	72	72	61	60	62	64	64	68	63	67	60	63	65	69	72	75	68	74	66.9
Bowling Green	Maximum	95	98	101	98	98	94	91	95	92	94	94	101	103	101	92	88	92	98	97	97	99	98	98	99	98	98	99	98	103	99	98	97.0
	Minimum	66	65	65	69	68	69	71	69	68	70	65	69	74	73	74	65	59	65	68	65	68	67	69	65	68	70	71	73	74	70	74	68.6
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	87	89	92	91	92	87	83	89	87	83	83	88	92	95	90	80	87	88	88	87	91	93	90	93	92	87	93	89	89	89	90	88.8
	Minimum	58	57	57	66	67	67	60	60	69	67	60	59	74	68	71	66	58	58	65	60	70	63	69	60	64	67	71	71	71	66	67	64.7
Frankfort	Maximum	88	92	93	93	94	93	87	91	91	91	88	94	96	97	94	81	85	90	92	84	91	94	90	93	94	94	94	93	95	91	95	91.5
	Minimum	62	60	62	66	72	70	69	68	70	67	60	61	77	74	73	66	59	62	68	66	71	65	60	65	70	71	74	65	75	70	73	67.6
Franklin	Maximum	93	95	99	98	100	92	90	93	91	96	100	100	100	102	95	85	88	95	94	94	97	99	94	99	94	92	95	97	101	97	96	95.5
	Minimum	66	65	63	69	71	70	72	68	75	70	70	74	75	75	73	67	58	65	67	64	67	68	70	66	71	70	74	73	74	69	74	69.5
Greensburg	Maximum	86	89	93	89	94	89	85	90	89	86	85	95	97	97	94	80	85	91	90	88	92	95	92	93	92	90	93	92	96	95	96	90.9
	Minimum	63	61	60	65	68	67	68	67	67	68	61	61	72	68	69	64	54	61	63	60	68	60	66	62	63	65	67	68	71	67	70	65.0
Irvington	Maximum	88	90	92	92	92	86	85	88	90	88	84	94	95	94	91	82	84	89	90	92	92	92	90	92	93	92	94	93	95	93	93	90.5
	Minimum	59	68	68	70	70	72	70	69	72	71	62	66	77	74	72	61	65	64	66	67	67	66	68	62	66	72	72	73	71	71	72	68.5
Junction City	Maximum	88	92	93	93	94	90	85	90	88	86	84	93	96	96	93	82	87	91	90	88	92	95	93	94	92	90	94	93	94	93	93	91.0
	Minimum	50	56	58	65	68	67	68	61	67	63	56	58	75	73	70	64	56	67	65	60	72	59	67	58	63	66	67	71	70	65	69	64.3
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	90	91	94	91	92	89	86	90	88	87	85	97	97	96	87	83	84	90	92	92	93	95	92	95	94	90	94	94	97	96	94	91.5
	Minimum	66	66	65	69	67	70	70	69	69	70	63	65	75	69	71	62	60	65	64	64	67	65	68	60	63	69	70	70	75	70	72	67.4
Lexington	Maximum	87	90	94	92	90	85	78	89	87	83	80	92	94	94	87	77	82	88	87	83	89	92	88	93	93	86	91	88	90	92	92	88.2
	Minimum	65	69	74	77	67	70	66	66	71	65	61	68	76	74	70	65	61	67	68	66	71	73	70	70	71	72	73	74	69	69	66	69.3
Louisville	Maximum	90	91	94	93	94	86	85	90	89	87	81	96	97	96	87	82	84	91	93	87	93	90	91	93	93	90	93	92	94	94	92	90.6
	Minimum	68	68	70	72	74	69	68	68	72	67	65	68	78	79	68	62	64	65	71	69	73	69	67	67	68	74	75	75	74	72	72	70.0
Do. (Cherokee Park)	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	64	64	65	68	72	71	68	67	70	68	60	62	77	75	72	60	59	61	67	66	70	65	64	62	66	71	79	74	75	70	72	67.9
St. John	Maximum	89	90	93	90	93	88	84	89	89	89	85	96	98	97	88	81	84	90	93	89	94	96	91	95	93	90	94	95	99	96	98	91.5
	Minimum	66	66	66	67	67	69	68	67	66	71	61	62	76	68	72	61	57	63	64	64	65	63	65	59	62	68	68	70	76	69	71	66.4
Scott	Maximum	88	90	97	96	89	90	83	89	90	87	81	91	95	93	87	79	83	89	86	76	87	88	90	92	93	89	92	93	91	94	89	88.9
	Minimum	57	58	61	64	72	70	65	63	65	63	56	57	72	74	71	63	57	63	69	64	66	67	63	61	65	71	72	72	74	62	68	65.3
Shelbyville	Maximum	90	94	97	95	95	93	87	92	93	88	85	95	96	96	90	84	89	94	95	86	94	97	96	98	98	92	96	95	99	100	95	93.4
	Minimum	60	59	61	65	69	68	65	64	68	64	54	60	72	71	72	59	55	58	63	62	67	62	62	58	61	66	68	69	71	66	72	64.2
Taylorsville	Maximum	87	90	94	94	95	87	83	89	92	88	80	96	97	95	89	80	85	90	89	87	92	91	90	93	93	92	96	95	94	92	92	90.5
	Minimum	62	60	61	70	71	69	69	67	72	68	59	60	73	71	72	61	57	60	64	64	68	61	64	57	60	67	67	69	72	68	71	65.6
Williamstown	Maximum	88	98	96	91	90	88	85	91	90	88	82	92	96	95	87	82	87	91	87	78	91	92	92	96	96	90	94	94	95	97	94	90.7
	Minimum	62	64	68	70	74	70	64	63	71	63	55	62	76	76	70	63	57	64	71	64	68	69	64	67	70	71	73	73	74	68	75	67.7
Eastern Division																																	
Beattyville	Maximum	89	91	96	98	95	96	87	92	90	88	87	95	99	100	95	85	90	92	87	87	92	89	91	97	98	93	100	96	99	93	97	93.0
	Minimum	53	56	61	65	68	67	70	67	66	69	58	59	73	69	69	70	57	61	66	64	62	67	64	60	64	64	66	67	68	67	62	64.5
Berea	Maximum	85	91	96	93	95	91	80	81	80	86	88	91	96	97	97	85	88	92	91	88	92	96	92	97	97	89	96	92	95	94	94	91.1
	Minimum	62	78	60	66	69	68	69	68	70	69	60	60	65	66	74	60	64	63	68	62	65	66	66	60	66	64	74	74	74	61	78	66.7
Farmers	Maximum	90	95	97	97	95	93	83	92	82	84	86	95	96	97	99	87	89	93	90	83	92	96	94	96	97	93	96	91	96	94	96	92.4
	Minimum	59	65	66	66	65	69	73	61	63	66	64	61	75	67	68	68	53	76	66	60	65	58	63	64	67	62	64	67	68	63	61	64.9
Harlan	Maximum	91	92	92	96	94	90	90	92	87	84	85	90	94	96	92	83	88	88	86	86	88	90	91	92	91	87	92	93	91	91	93	90.2
	Minimum	52	53	60	66	65	69	68	70	67	63	66	60	72	69	70	70	62	66	67	66	63	66	67	67	67	65	66	66	69	68	62	65.4
Maysville	Maximum	90	94	98	98	100	93	89	94	95	90	86	96	100	101	95	82	87	92	89	85	92	95	92	97	98	97	99	98	97	96	99	94.0
	Minimum	56	59	61	64	69	68	68	66	67	66	55	56	73	73	70	68	56	62	74	66	67	65	65	58	63	69	70	72	73	60	66	65.3
Middlesboro	Maximum	86	91	93	92	94	90	90	90	85	88	87	88	96	96	92	85	90	90	88	90	88	90	90	92	90	90	94	94	93	94	93	90.6
	Minimum	53	59	60	66	61	70	67	67	66	65	66	60	70	68	69	71	69	61	66	63	63	65	67	65	65	63	65	66	70	67	62	65.0
Mount Sterling	Maximum	86	89	93	95	92	91	80	87	89	86	83	92	99	95	94	79	84	89	88	82	91	89	89	94	90	91	96	92	93	92	95	89.8
	Minimum	58	57	61	66	70	67	69	66	70	65	58	58	70	73	72	64	58	63	69	62	68	63	66	64	64	66	69	71	74	72	66	65.8
Richmond	Maximum	89	91	94	93	93	88	79	92	88	86	84	92	96	97	93	85	88	91	86	84	92	96	92	95	96	90	95	92	94	93	94	90.9
	Minimum	61	61	64	69	71	70	70	66	69	68	59	62	73	73	66	66	58	64	69	64	70	65	68	64	68	68	71	72	72	66	71	67.0
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	87	92	94	97	92	89	91	89	89	87	86	91	97	98	96	89	91	91	93	91	91	95	93	96	93	93	96	96	95	95	95	92.5
	Minimum	58	59	59	61	63	62	63	71	67	64	69	60	68	70	68	69	58	65	66	66	62	65	63	65	66	68	68	65	75	73	65	65.2

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c], etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
Based on 850 records
NO RAIN
NO RAIN

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

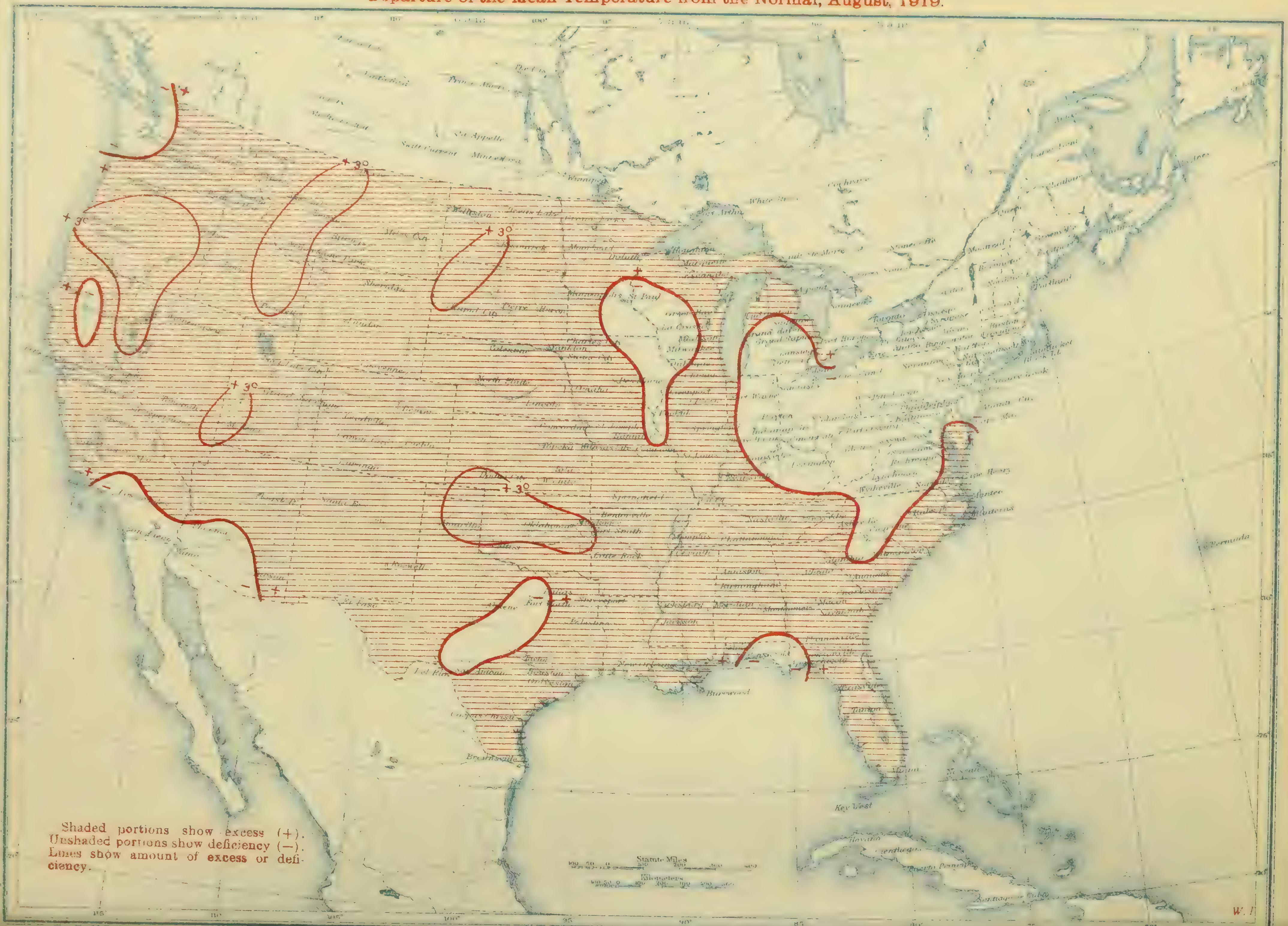
KENTUCKY SECTION

AUGUST, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 27 1919.

Departure of the Mean Temperature from the Normal, August, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of **excess** or **deficiency**.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., August, 1919. No. 8

GENERAL SUMMARY.

While both temperature and rainfall averaged near normal, conditions were generally unfavorable for growth of the staple crops during August. This was due in part to the serious drought already prevailing over a large portion of the State at the beginning of the month, and partly to the character of the rainfall, which occurred usually in the form of heavy downpours accompanying thunderstorms. These heavy showers fell on very dry soil, with considerable run-off and only moderate penetration. Except in a few limited areas there was at no time sufficient rainfall to saturate the soil and meet the requirements of vegetation; while in many districts, principally in the northern and central counties, the drought was never broken and scarcely more than checked by the light to moderate showers. In these drought-stricken areas corn and tobacco made indifferent progress and ripened prematurely. Cutting and housing of early tobacco began about two weeks earlier than usual on account of "firing", this work being well advanced by the end of the month. Corn cutting also began unusually early for the same reason. Pastures became short, and stock water low; while gardens practically ceased to produce.

PRESSURE.

The low pressure areas affecting weather conditions over this section during the month mostly passed to the northward; while high pressure areas lying to the southeast and south, or passing slowly over the State from the northwest, were usually dominant, producing a condition unfavorable for general rains. The mean sea-level pressure based on the reports of two stations, was 30.00 inches. The extremes were 30.23 inches on the 11th and 29.82 inches on the 17th, both at Louisville.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 75.0°, which is 0.7 below normal. During the first three weeks maximum temperatures of 90° to 100° occurred every day; but minimum temperatures were frequently below 60°. The last week was quite cool, minimum temperatures falling below 50°. The extremes were 104° at Bowling Green on the 6th, and 47° at Anchorage and Mt. Sterling on the 28th.

PRECIPITATION.

Precipitation for the State, based on reports from 52 stations, was 3.49 inches, which is 0.07 inch less than normal. Its distribution over the State was very irregular. The extreme western counties and portions of the upper basins of the Cumberland and Kentucky rivers received from 4.00 to more than 6.00 inches; but over most of the main farming district amounts ranged between 1.50 and 3.50 inches. The deficiency was greatest in the northern blue grass region, where scarcely half of the normal amount occurred. At the various stations amounts ranged between 0.84 inch at Maysville and 6.98 inches at Paducah. Thunderstorms were frequent and often attended by damaging winds.

WIND.

The total wind movement at Louisville was 7,247 miles and at Lexington 8,091 miles, with average hourly velocities of 9.7 and 10.9 miles, respectively. The maximum velocity for five minutes was at the rate of 54 miles from the west at Louisville, and 42 miles from the northwest at Lexington, on the 20th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 78 per cent, at 12 noon 53 per cent, and at 7 p. m. 60 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 81 and at Lexington 65.

MISCELLANEOUS

August 1.—A man was killed by lightning at Owensboro and another near Shelby City.

August 6.—A large stock barn was destroyed by lightning near Clintonville with a loss of $15,000. A McLean County farmer died as a result of heat prostration.

August 11.—A rain and windstorm destroyed all growing crops in a path two miles wide through Martin County.

August 13.—Three fires were caused by lightning at Louisville.

August 15—Several buildings were blown down and others unroofed by a windstorm near Hopkinsville.

August 20.—Roofs and windows were damaged by a windstorm at Louisville.

Rivers.—The streams of the State were at low stages during the month.

COMPARATIVE DATA FOR AUGUST.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 in. or more.
1889	70.6	−5.1	100	43	1.23	−2.33	..
1890	73.2	−2.5	101	44	6.16	+2.60	..
1891	72.9	−2.8	105	43	5.82	+2.26	..
1892	75.4	−0.3	96	45	3.13	−0.43	..
1893	74.8	−0.9	99	48	1.72	−1.84	..
1894	77.1	+1.4	105	41	3.02	−0.54	
1895	76.6	+0.9	102	49	2.15	−1.41	6
1896	77.1	+1.4	105	41	2.83	−0.73	5
1897	75.2	−0.5	101	49	2.33	−1.23	6
1898	76.7	+1.0	100	55	3.83	+0.27	7
1899	78.1	+2.4	102	51	3.09	−0.47	6
1900	80.4	+4.7	104	52	2.74	−0.82	6
1901	75.5	−0.2	101	50	5.12	+1.56	12
1902	75.6	−0.1	103	45	2.48	−1.08	7
1903	75.5	−0.2	100	49	3.27	−0.29	8
1904	75.2	−0.5	100	45	2.64	−0.92	8
1905	75.7	0.0	99	42	3.82	+0.26	9
1906	77.4	+1.7	99	45	4.37	+0.81	10
1907	74.8	−0.9	99	48	4.27	+0.71	10
1908	76.3	+0.6	104	49	2.79	−0.77	6
1909	76.9	+1.2	104	45	2.60	−0.96	7
1910	74.0	−1.7	100	46	2.72	−0.84	6
1911	76.2	+0.5	106	45	4.03	+0.47	10
1912	73.7	−2.0	98	43	4.71	+1.15	13
1913	78.0	+2.3	108	44	2.81	−0.75	7
1914	76.0	+0.3	100	49	5.94	+2.38	12
1915	71.3	−4.4	100	42	6.29	+2.73	14
1916	77.0	+1.3	101	47	4.25	+0.69	9
1917	73.9	−1.8	100	42	3.49	−0.07	8
1918	80.2	+4.5	111	50	3.18	−0.38	7
1919	75.0	−0.7	104	47	3.49	−0.07	8

Climatological data for August, 1919.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	76.0	− 0.2	99	7	49	26	41	2.59	−0.75	0.86	0	8	21	10	0	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	76.2	− 0.6	96	6	58	26	27	4.32	+1.18	1.89	0	6	9	17	5	sw.	E. W. Horr.
Calhoun	McLean	437	15	76.2	− 1.3	100	5†	53	3†	40	2.78	−0.58	1.46	0	9	11	17	3	sw.	W. A. Taylor.
Earlington	Hopkins	420	28	78.2	+ 1.1	102	6	52	26	40	2.87	−0.28	1.10	0	7	23	0	8	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	^{b}75.8	......	98^{b}	6	51^{b}	26	37^{b}	3.38	......	1.10	0	6	23^{b}	5^{b}	1^{b}	w.	C. R. Lovell.
Henderson	Henderson	327	11	......	......	......	......	......	......	......	2.59	+0.29	0.64	0	7	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	22	77.2	− 0.6	99	6	52	26	36	6.22	−3.17	1.63	0	9	16	5	10	w.	W. E. Graves.
Marion	Crittenden	571	20	76.6	− 1.7	99	6	56	26	33	4.45	+1.66	1.28	0	8	13	14	4	n.	B. C. Paris.
Mayfield	Graves	364	9	76.4	− 0.9	98	4	53	26	35	4.94	+1.70	1.10	0	8	7	15	9	sw.	J. N. Davis.
Owensboro	Daviess	479	22	75.0	− 1.4	94	5†	54	26	32	3.15	−0.44	1.10	0	9	18	8	5	sw.	Henry S. Berry.
Paducah (near)	McCracken	341	19	78.5	− 2.2	100	6	56	25	34	6.98	+3.73	2.00	0	8	23	5	3	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{e}76.8	− 2.1	97a	2†	50^{e}	26	33^{e}	5.24	+1.71	2.53	0	6	14^{a}	0^{a}	17a	w.	Ray Baker.
Russellville	Logan	590	6	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	73.8	− 2.3	92	6	50	20	36	3.15	−1.18	1.50	0	5	4	12	15	w.	Taylor Davis.
Anchorage	Jefferson	700	18	73.6	− 1.0	96	6	47	28	38	3.92	+0.34	2.74	0	5	24	4	3	sw.	C. E. Barret.
Bardstown	Nelson	637	22	75.0	− 2.2	96	5	51	10†	34	3.85	+0.24	0.98	0	6	27	1	3	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	78.9	0.0	104	6	56	3†	40	2.81	−0.71	0.63	0	6	16	9	6	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	......	......	......	......	......	......	......	3.18	......	0.68	0	11	......	......	......	......	James H. Young.
Burnside	Pulaski	773	26	......	......	......	......	......	......	......	3.74	−0.37	1.30	0	7	......	......	......	......	F. E. Bradshaw.
Carrollton	Carroll	492	20	......	......	......	......	......	......	......	1.92	−0.90	1.11	0	8	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	5	......	......	......	......	......	......	......	3.63	......	1.47	0	9	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	25	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Eubank	Pulaski	1177	24	73.9	+ 0.1	91	6	48	28	31	6.21	+2.26	2.37	0	7	7	20	4	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	75.6	+ 0.6	96	5	52	28	31	1.69	−1.99	0.52	0	7	17	7	7	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	77.6	+ 0.4	101	6	54	26	34	3.46	+0.16	1.57	0	7	15	8	8	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	73.6	− 2.0	93	15	49	26	34	2.66	−1.24	1.20	0	9	8	5	18	sw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	......	......	......	......	......	......	......	4.21	−0.34	1.91	0	7	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	21	74.2	− 1.8	93	5	55	26†	27	3.67	+0.07	1.09	0	5	22	4	5	sw.	W. J. Piggott.
Junction City	Boyle	985	25	73.5	− 0.8	93	6†	50	26	35	4.48	+1.15	1.36	0	10	17	10	4	sw.	Prof. E. L. Grubbs.
Lebanon	Marion	754	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Leitchfield	Grayson	635	23	74.2	− 1.2	94	6	52	26	30	2.88	−0.79	1.28	0	7	19	8	4	nw.	John E. Stone.
Lexington	Fayette	989	31	73.5	− 1.1	91	6	58	9	29	2.39	−1.18	0.74	0	8	16	9	6	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	75.8	− 0.7	94	6	60	11	27	1.57	−1.94	1.23	0	6	20	4	7	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	9	73.2	− 2.1	91	5	54	28	29	2.77	−1.38	1.70	0	7	20	5	6	n.	Wm. I. Hunt.
St. John	Hardin	777	22	74.2	− 0.5	97	5	50	20	37	2.17	−1.46	0.54	0	6	24	1	6	......	Sisters of Loretto.
Scott ¶	Kenton	900	21	73.9	− 1.2	95	15	50	28	34	1.55	−1.99	0.38	0	11	9	18	4	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	74.2	− 1.3	99	6	48	26†	38	1.97	−1.39	0.64	0	8	21	4	6	sw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	72.4	− 2.0	94	5	48	26	38	2.63	−1.09	1.06	0	7	19	5	7	sw.	E. D. Bourne.
Williamstown	Grant	943	16	75.4	+ 1.6	98	6†	54	26†	37	1.71	−2.43	0.83	0	8	11	17	3	......	Miss Rose Carter.
Woodbury	Butler	533	1	......	......	......	......	......	......	......	2.86	......	0.81	0	8	......	......	......	......	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	74.4	− 0.5	96	4†	50	27†	38	3.70	−0.93	0.78	0	10	13	8	10	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	74.2	− 0.4	94	4†	48	27	36	5.73	+0.79	4.00	0	7	16	4	11	sw.	Prof. Chas. D. Lewis.
Catlettsburg ‡	Boyd	534	30	......	......	......	......	......	......	......	3.48	−0.13	0.75	0	14	......	......	......	......	Forester Farley.
Cynthiana	Harrison	684	1	......	......	......	......	......	......	......	2.25	......	0.85	0	8	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	30	......	......	......	......	......	......	......	1.22	−2.31	0.39	0	6	19	8	4	s.	J. V. Oldham.
Farmers	Rowan	668	11	73.0	− 0.8	96	4†	50	28†	41	3.22	−1.60	0.70	0	7	17	14	0	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	^{a}73.4	......	92^{a}	6	51^{a}	27	30^{a}	5.95	......	1.82	0	14	14^{a}	8^{a}	8^{a}	s.	Will Ward Duffield.
Jackson	Breathitt	776	7	......	......	......	......	......	......	......	2.72	......	0.77	0	7	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	4	......	......	......	......	......	......	......	4.45	......	0.85	0	9	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	15	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	Miss Carrie S. Adams.
Maysville	Mason	524	21	76.0	+ 0.3	102	5	51	26	37	0.84	−3.14	0.45	0	8	15	10	6	ne.	J. C. Armstrong.
Middlesboro	Bell	1128	21	73.9	− 0.5	95	7	51	27	33	5.68	+2.15	1.40	0	17	19	12	0	......	B. H. Perkins.
Mount Sterling	Montgomery	930	29	73.2	− 0.9	94	7	47	28	37	4.67	−0.70	1.27	0	11	23	5	3	w.	W. R. McKee.
Pikeville	Pike	634	13	......	......	......	......	......	......	......	4.20	+0.68	0.92	0	10	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	73.6	− 2.0	93	4†	53	26	33	5.27	+2.07	1.45	0	11	20	6	5	......	J. W. Crooke.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	P. V. Johnson.
Williamsburg	Whitley	939	21	75.2	− 0.9	95	7	50	26	34	3.85	−0.67	1.20	0	8	8	16	7	s.	N. C. Jones.
State averages and extremes				75.0	......	104	6	47	28	41	3.49	......	4.00	8	8	17	8	6	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for August, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																	
Beaver Dam ‖	G	.16	.50				.41										.23					.86								.33	.05	.05	2.59
Blandville	M	1.89												.55			.71							.02					.45	.70			4.32
Calhoun	G	T.	T.		.11	.08	.35								T.		.29				.21	1.46				.02			.06	.20		T.	2.78
Earlington ‖	G		.60					.10									.15					1.10							T.	[illegible]	.36	.16	[illegible]
Greenville	G	1.10															.30				.92								.08	.80		.18	[illegible]
Henderson ‖	O	.20	.24				.60	.25														.64				.54				T.	.12		2.59
Hopkinsville ‖	C	.22	1.41					.02									1.63					.47	.09						.04	.90	1.44		6.22
Marion	O						.47	1.28									.38				.28					.33			.04	.61	.76		4.15
Mayfield ‖	M		.98												.60		.28							.55					.55	1.10	.85	.03	4.94
Owensboro ‖	O	.90	.67				.03	.02						.02			.10					1.10							T.	.02	T.	.29	3.15
Paducah (near)	O	1.80													.58		1.00					.17	.18						1.00	2.00	.25		6.98
Princeton ‖	G	2.53						.71									.70						T.			.15			.62		.53		5.24
Russellville ‖	G																.56						.05							.80	1.55		
Central Division.																																	
Alpha	C	T.				1.50								.50								.60								.25	.30		3.15
Anchorage	O	.61												.07	2.74		.04					.46											3.92
Bardstown ‖	S	.63	.98				.50								.84							.63	.27										3.85
Bowling Green ‖	G	.18	.60				T.										.45						.45							.63	.50	T.	2.81
Brownsville ‖	G	.40	.64				.68							.02	.02		.40	.04				.13	.08							.58	.19		3.18
Burnside ‖	C	.14	1.30				.42					T.	T.		.20							.18	T.			T.				1.13	.20	.17	3.74
Carrollton ‖	O	.25	.14												.02			.02				.29	.07			.02						1.11	1.92
Cloverport ‖	O	.19	1.22				1.47							.21	.03		.02					.46	.02			T.				T.	T.	.01	3.63
Edmonton	G																																
Eubank ‖	C	1.55	.95				2.37								.16							.20	.35								.63		6.21
Frankfort ‖	K	.25	.12				.09								.34			.20				.52	.17										1.69
Franklin	G	.24	.15														.50					.22							.07	1.57	.71		3.46
Greensburg ‖	G	.15	1.20				.37						T.		.16		T.	.10				.27	.06							.30	.05		2.66
High Bridge ‖	K	.15	.27				1.91								1.06			.46				.28	.08										4.21
Irvington	O	.99				.36	.83							T.	.40		T.					1.09							T.		T.	T.	3.67
Junction City	K	.17		.33		1.36	.30	T.							.82			.04			.51	.86						T.	.06	.03			4.48
Lebanon	S																																
Leitchfield	G	1.28				1.04								.03			.25				.12								*	.16			2.88
Lexington ***	K	.42			T.	.28								.50	.03		.25				.34	.40									.17		2.39
LOUISVILLE***	O	.02				.01	T.	.03						1.23			.05				.23	T.			T.						T.		1.57
Do. (Cherokee Park)	O	.35				.05		.07						.04	1.70		.17					.39							T.				2.77
St. John ‖	S	.39	.54		T.		.52								T.		.13	.05				.54				T.				T.			2.17
Scott	L	.09			.03	T.	.33							.05	.06		.06	T.		.02		.38				.33					.13	.07	1.55
Shelbyville ‖	S	.10	.28		.02		.03								.64			.10				.33	.47										1.97
Taylorsville	S	.58			T.	.12	.01							T.	1.06		.08					.75							T.	T.	.03		2.63
Williamstown ‖	L		.03			T.	T.								.10	.50		.05		.10			.83				.03					.07	1.71
Woodbury ‖	G	.15	.81														.60	T.				.18	.07							.56	.23	.26	2.86
Eastern Division.																																	
Beattyville ‖	K	.37	.23				.55						T.		.59	T.		.78	.06	.11		.45	.49								T.	.07	3.70
Berea	K	.44	.26			4.00								T.	.02		.06		T.		.20	.75						T.	T.				5.73
Catlettsburg ‖	B	.60	.15				.07						.18	.20	.22			.32	.10	.02		.20	.56						.08		.03	.75	3.48
Cynthiana ‖	L	.85	.15		T.		.30		T.						.30			.15	.05				.30									.15	2.25
Falmouth ‖	L														.22			.08				.38	.12								.39	.63	1.22
Farmers	L	T.												.60	.25			.67	.20			.60	.20									.70	3.22
Harlan	K	1.82	.15	.15			.43					.02	.39		.57		.34		.15				.67						.01	.81	.20	.24	5.95
Jackson ‖	K	T.	.15				.24								.77			.25	T.	T.		.50	.61							T.	T.	.20	2.72
London ‖	C	.30	.75				.85						.40		.10				.20			.80									.70	.35	4.45
Louisa ‖	B																																
Maysville ‖	O	.05					.05							.06			.02					.11	.45								.05	.05	0.84
Middlesboro	C	1.02	.09				1.40	.08					.93	.45	.03	.06	.05	.07	.42			.02	.05						.02	.33	.10	.56	5.68
Mount Sterling ‖	L	.40	.02				.20	.45							1.00			.60	.04			.35	.25								.09	1.27	4.67
Pikeville ‖	B		.72				T.		.42				.92	T.	.16			.86	T.	.36	.04	T.	.06								.04	.62	4.20
Richmond ‖	K	1.20	.11				1.32		.08					T.	.66			.12	.01			.29	1.45							.02	.01	T.	5.27
Weeksbury	B																																
Williamsburg ‖	C	.75	.65				.64						1.20	.12	.10				.17				T.		T.					T.	.22		3.85

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

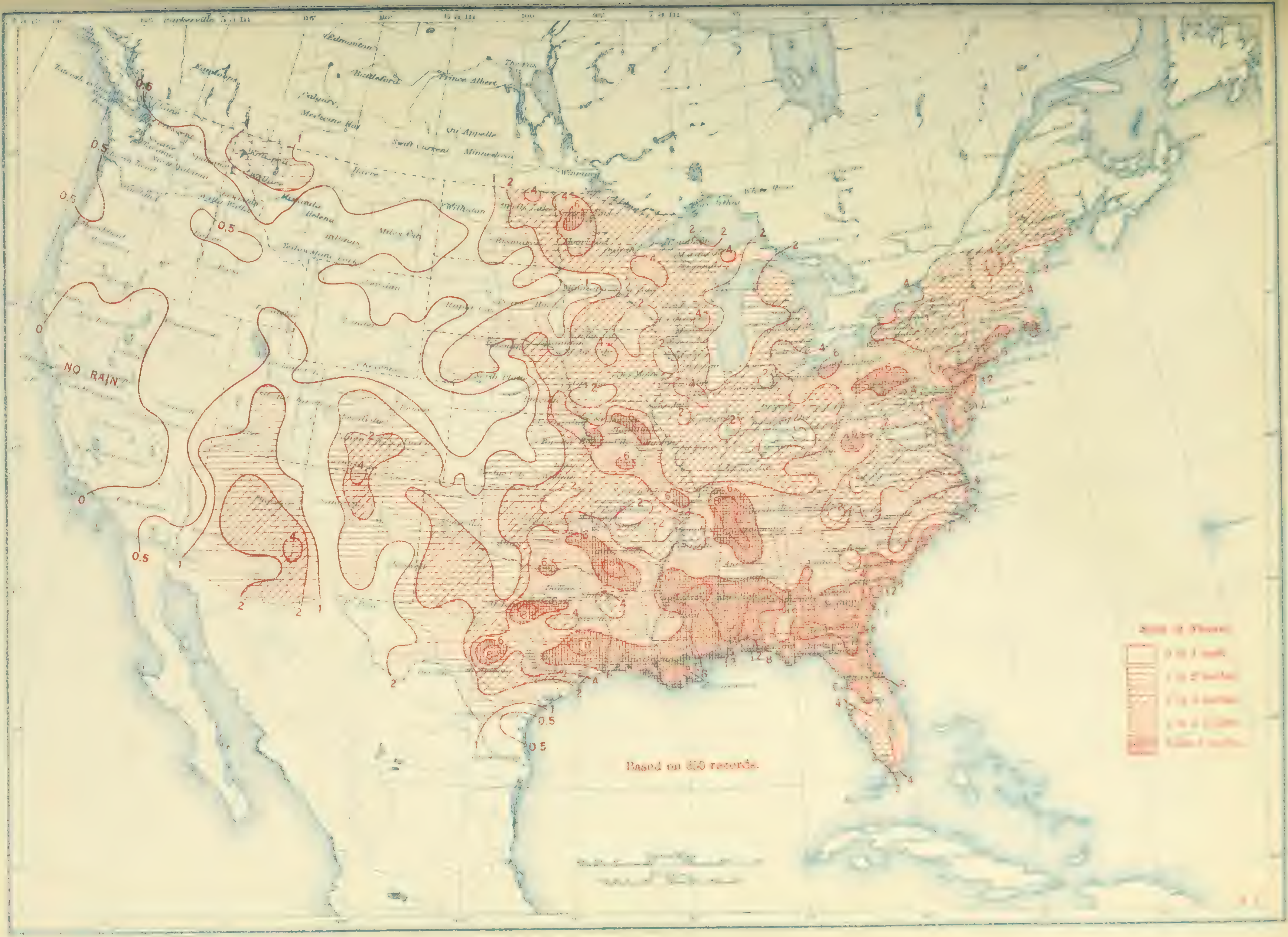
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

Daily temperatures for August, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	92	85	90	98	98	98	99	91	85	88	93	94	96	95	98	87	93	91	91	94	82	90	90	90	85	86	86	79	80	87	76	89.9
	Minimum	70	67	53	66	75	70	72	65	63	52	54	56	68	70	67	68	66	59	56	56	65	63	55	64	65	49	56	56	63	65	58	62.0
Blandville	Maximum	94	85	87	94	93	96	93	90	84	86	89	92	91	87	84	81	88	85	86	88	83	80	79	86	81	80	81	77	75	84	73	85.5
	Minimum	71	66	65	73	76	74	73	70	66	60	62	65	70	69	69	67	69	63	62	64	71	69	70	68	68	58	66	59	64	68	59	66.9
Calhoun	Maximum	90	84	92	99	100	100	96	91	86	86	92	96	96	95	99	93	92	91	92	91	82	87	88	90	86	86	87	81	81	88	81	90.3
	Minimum	62	64	53	69	65	71	69	65	62	58	56	59	66	68	59	67	67	61	60	58	65	64	65	63	63	53	58	59	63	55	55	62.0
Earlington	Maximum	97	89	95	100	101	102	100	95	88	93	97	98	97	99	101	89	95	91	93	93	87	87	88	93	87	88	87	77	80	88	79	92.1
	Minimum	74	66	56	70	77	73	70	65	65	54	55	59	65	71	61	69	70	61	59	59	67	67	68	64	67	52	59	61	65	67	58	64.3
Greenville	Maximum	92	85	89	96	95	98	95	..	90	88	92	94	95	95	96	86	92	91	90	82	84	85	89	84	85	84	85	78	76	..	86	ᵇ88.9
	Minimum	69	65	55	66	75	72	70	..	62	55	55	57	64	68	60	67	66	58	58	65	65	67	63	65	63	51	57	59	64	..	57	ᵇ62.7
Hopkinsville	Maximum	90	87	90	97	97	99	96	91	88	91	93	95	96	95	95	86	91	89	89	92	86	82	89	91	87	88	85	78	74	87	79	89.5
	Minimum	72	68	57	69	74	71	70	67	66	58	59	61	66	70	65	68	65	59	66	60	67	66	68	65	68	52	58	69	65	66	60	65.0
Marion	Maximum	91	88	93	97	98	99	92	89	84	88	88	86	93	93	91	84	89	87	88	90	82	80	82	89	86	83	75	77	85	71	82	87.1
	Minimum	73	65	60	74	76	75	70	68	64	76	58	60	65	60	69	67	68	67	63	65	62	68	69	67	65	56	58	65	60	57	67	65.7
Mayfield §§	Maximum	97	85	90	96	95	98	94	91	86	88	94	95	95	91	88	85	90	88	88	90	83	80	81	90	86	84	85	80	73	87	75	88 0
	Minimum	75	69	63	69	75	73	72	68	67	56	59	61	66	62	68	68	67	61	61	62	66	67	68	67	68	53	57	58	60	67	59	64.9
Owensboro	Maximum	85	83	85	93	94	94	90	82	83	82	89	90	92	92	94	89	89	86	88	89	83	85	86	85	86	81	81	75	81	85	75	86.2
	Minimum	69	67	59	70	75	71	71	70	69	62	63	60	60	67	62	69	67	60	58	59	59	64	65	64	64	54	57	60	62	65	58	63.9
Paducah (Lone Oak)	Maximum	98	88	96	99	98	100	96	94	92	91	92	93	96	95	92	94	93	94	95	94	93	86	90	92	86	85	86	85	86	88	84	92.0
	Minimum	64	62	68	72	75	74	70	68	66	62	60	59	63	66	68	69	67	66	68	62	68	63	67	66	56	60	62	61	60	59	58	65 0
Princeton §§	Maximum	94	97	90	91	95	97	93	97	84	87	90	93	95	90	93	85	89	87	89	92	82	81	97	90	82	..	85	77	74	85	70	ᵃ88.4
	Minimum	72	64	61	68	72	69	..	..	..	..	60	61	69	69	64	68	70	58	59	60	67	67	68	69	67	50	..	63	65	69	63	ᵉ65.1
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	91	90	88	92	86	86	87	91	85	86	86	78	76	85	......
	Minimum	..	..	..	..	..	..	..	..	..	56	61	61	64	70	64	65	68	61	60	61	61	71	67	66	68	52	58	60	62	66	61	......
Central Division.																																	
Alpha	Maximum	80	79	84	86	88	92	89	86	75	82	86	86	80	83	89	88	82	82	83	86	76	82	81	80	81	80	78	78	73	78	78	82.3
	Minimum	74	71	51	69	76	72	70	70	61	59	66	68	71	69	66	73	64	60	58	50	70	70	70	65	68	53	63	56	66	56	68	65.3
Anchorage	Maximum	83	82	86	94	95	96	94	90	86	89	94	92	87	90	93	85	88	87	87	88	79	88	89	88	81	82	83	77	83	83	76	86.9
	Minimum	69	61	55	64	70	65	68	62	57	56	56	55	62	65	60	67	65	59	57	58	66	60	60	61	58	48	57	47	56	67	57	60.3
Bardstown	Maximum	85	86	85	94	96	94	92	88	85	85	89	90	88	87	93	85	89	86	89	90	90	88	90	91	87	83	84	76	82	83	79	87.4
	Minimum	70	64	64	65	72	69	70	68	61	51	57	65	62	65	60	68	64	60	59	60	58	64	63	63	62	51	55	57	60	68	64	62.5
Bowling Green	Maximum	91	94	96	98	99	104	100	94	90	93	94	97	95	98	101	97	95	91	98	93	89	86	89	94	88	88	87	81	78	88	88	92.7
	Minimum	71	68	56	65	75	73	72	70	65	58	60	61	64	69	67	68	65	63	62	62	68	68	68	67	67	56	60	59	65	66	61	65.1
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	82	78	85	88	90	91	90	84	80	82	85	87	81	87	88	85	85	82	85	86	81	84	86	86	80	81	81	73	76	79	75	83.3
	Minimum	70	63	54	63	71	67	67	68	61	55	55	67	65	64	60	63	63	55	55	55	65	68	59	61	63	58	52	48	56	65	62	64.5
Frankfort	Maximum	88	82	85	93	96	95	95	89	87	85	89	89	89	88	93	91	89	88	87	90	87	89	90	90	87	81	82	81	82	82	82	87.8
	Minimum	71	64	56	67	73	70	72	68	61	60	58	66	63	68	62	66	65	64	61	60	66	66	64	65	62	53	56	52	56	69	59	63.3
Franklin	Maximum	89	84	86	94	97	101	99	92	87	89	95	95	94	93	92	84	91	90	92	93	87	81	86	91	87	88	86	81	75	84	81	89.2
	Minimum	71	70	55	67	75	75	72	70	65	56	61	68	68	70	68	68	67	63	63	64	70	70	69	69	67	54	61	62	65	66	61	66.1
Greensburg	Maximum	87	80	84	91	92	92	92	89	81	85	90	91	86	88	93	83	89	87	89	90	85	88	88	87	87	83	83	75	77	87	78	86.4
	Minimum	67	65	51	64	71	69	67	67	62	52	55	93	58	65	62	65	59	57	56	55	65	67	61	63	64	49	54	50	58	65	59	60.8
Irvington	Maximum	84	79	84	92	93	92	90	87	80	82	85	87	87	87	89	86	87	83	85	87	80	85	86	86	82	81	81	74	80	82	77	84.5
	Minimum	68	66	58	70	73	70	74	68	60	58	58	60	67	68	62	72	67	64	60	62	60	66	65	64	63	55	55	57	64	67	59	63.9
Junction City	Maximum	86	81	86	91	91	93	93	91	84	84	89	89	89	88	92	88	88	85	86	87	86	87	87	88	86	82	82	81	78	81	77	86.3
	Minimum	70	62	51	61	70	69	69	67	60	54	55	67	66	59	58	62	63	59	59	55	66	60	59	61	61	50	56	49	55	67	61	60.7
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	84	82	86	92	93	94	90	86	81	84	86	88	91	89	92	83	88	85	86	89	80	86	86	88	85	80	81	76	76	83	74	85.3
	Minimum	69	65	57	66	73	70	73	66	62	57	59	62	62	69	63	68	66	62	58	59	66	64	65	64	63	52	56	57	61	66	59	63.2
Lexington	Maximum	79	79	85	90	89	91	90	84	79	82	87	87	77	86	91	78	85	80	83	85	79	84	85	85	78	78	79	73	78	77	71	82.4
	Minimum	69	61	63	70	71	69	74	65	58	58	58	68	66	65	75	67	65	64	63	63	64	66	66	68	60	58	60	63	62	66	58	64.6
Louisville	Maximum	81	81	85	92	93	94	92	87	83	84	87	91	86	88	92	84	88	84	88	87	78	87	87	86	79	82	82	76	80	81	72	85.1
	Minimum	71	65	63	72	73	73	74	71	62	61	60	65	68	68	67	72	70	67	65	65	65	69	69	69	64	61	62	61	62	67	60	66.5
Do. (Cherokee Park)	Maximum	79	77	81	90	91	90	89	86	82	80	85	86	83	85	87	86	85	81	83	84	78	84	84	84	82	79	80	74	79	79	77	82.9
	Minimum	71	63	58	69	73	69	72	68	59	57	56	61	65	67	64	71	68	64	62	61	66	64	66	65	62	55	57	54	58	68	59	63.6
St. John	Maximum	84	79	85	93	97	94	93	87	82	85	90	92	90	93	96	86	82	88	91	90	82	89	88	89	82	84	85	76	78	84	76	86.8
	Minimum	69	64	54	67	74	68	71	65	60	56	57	59	61	68	59	69	63	58	56	57	65	60	62	61	60	50	56	55	59	67	58	61.5
Scott	Maximum	79	78	86	92	94	93	94	86	78	88	88	86	81	91	95	85	89	86	88	88	80	90	91	89	82	80	90	80	82	86	78	85.9
	Minimum	70	58	53	66	74	68	72	70	53	55	54	65	62	68	65	67	65	64	60	61	64	63	66	65	57	52	55	50	52	67	58	61.9
Shelbyville	Maximum	85	85	90	97	97	99	98	92	88	90	90	94	88	92	95	90	90	86	91	92	84	89	90	91	84	84	85	80	85	84	80	89.2
	Minimum	68	59	53	65	72	65	69	63	55	52	53	61	60	63	60	65	60	58	57	57	63	60	61	61	57	48	51	48	53	65	55	59.3
Taylorsville	Maximum	81	81	83	93	94	93	92	86	82	84	89	89	84	87	89	82	87	83	85	88	83	87	87	86	79	80	82	74	81	81	75	84.7
	Minimum	71	63	54	63	71	67	70	65	58	52	51	61	60	65	58	65	61	59	57	55	65	60	60	61	60	48	51	50	54	68	58	60.0
Williamstown	Maximum	82	84	91	95	96	98	97	89	87	88	92	92	85	93	98	84	88	83	90	90	82	89	92	89	82	82	80	79	82	84	80	87.8
	Minimum	70	58	58	68	75	69	72	64	55	55	55	67	66	67	67	68	66	65	62	64	64	65	65	67	58	54	58	54	56	66	56	63.0
Eastern Division																																	
Beattyville	Maximum	88	83	86	96	90	94	96	91	87	90	92	86	87	91	95	83	90	86	89	91	85	92	91	94	83	83	80	75	85	83	77	87.8
	Minimum	69	54	63	61	66	68	67	67	60	52	54	66	62	65	63	62	64	58	58	59	65	66	61	64	62	52	50	50	56	65	61	61.0
Berea	Maximum	89	81	87	94	90	94	94	89	88	83	94	94	82	88	94	81	87	84	88	82	84	88	85	81	82	80	75	77	81	75	76	85.4
	Minimum	71	63	54	74	69	67	74	68	61	63	58	68	67	64	59	63	64	60	59	65	63	63	63	63	50	57	48	57	67	65	65	63.0
Farmers	Maximum	86	85	90	96	95	96	95	95	88	80	94	89	85	90	96	80	87	85	88	87	80	85	91	88	80	83	84	77	84	79	76	87.0
	Minimum	68	56	50	65	64	67	62	63	52	52	53	64	57	64	55	67	59	56	72	72	57	60	56	59	57	51	51	50	55	54	62	59.0
Harlan	Maximum	83	82	89	91	90	92	90	87	81	89	74	90	76	97	...	89	88	85	78	86	77	83	85	87	82	81	79	71	77	78	80	ᵃ83.6
	Minimum	69	68	59	65	65	69	69	72	60	59	63	62	69	65	..	63	67	63	60	59	63	65	68	62	65	54	51	56	60	62	62	ᵃ63.1
Maysville	Maximum	84	82	90	100	102	95	99	91	86	85	90	90	91	92	98	93	94	89	89	95	89	94	96	95	85	85	86	83	86	85	84	90.4
	Minimum	71	60	54	66	77	68	67	67	55	55	54	65	61	63	61	75	63	63	60	61	66	63	62	64	62	51	53	53	54	56	58	61.5
Middlesboro	Maximum	85	84	88	91	93	92	95	90	86	90	86	81	81	86	89	81	88	85	87	87	88	87	84	88	84	83	84	76	76	77	80	85.5
	Minimum	70	67	58	62	64	68	67	69	61	66	62	60	64	63	68	62	64	61	58	58	64	65	60	68	64	52	51	55	59	61	59	62.3
Mount Sterling	Maximum	86	80	86	92	92	92	94	86	82	85	91	90	85	86	91	84	86	84	86	89	84	88	90	80	88	80	81	76	82	80	75	85 5
	Minimum	68	61	53	65	71	67	68	66	56	54	55	67	64	63	63	63	63	61	60	61	64	65	64	63	51	59	55	47	52	66	56	61.0
Richmond	Maximum	84	83	87	93	90	92	93	87	85	87	89	89	78	87	92	81	86	84	86	88	81	86	87	89	82	81	82	72	79	78	77	85 0
	Minimum	69	62	56	67	69	67	70	67	57	55	56	67	66	63	62	67	64	62	60	61	64	65	64	65	61	53	57	52	58	65	60	62.3
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	89	88	87	93	93	93	95	93	90	87	86	87	86	84	90	90	88	89	88	90	87	89	89	89	85	84	82	80	76	81	82	87.4
	Minimum	71	69	67	68	67	69	67	67	60	61	59	67	67	67	66	62	63	60	58	56	61	70	68	65	63	50	51	53	58	60	63	63.0

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

ᵃ, ᵇ, ᶜ, etc. indicate respectively 1, 2, 3, etc., days missing from record.



Based on 850 records.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

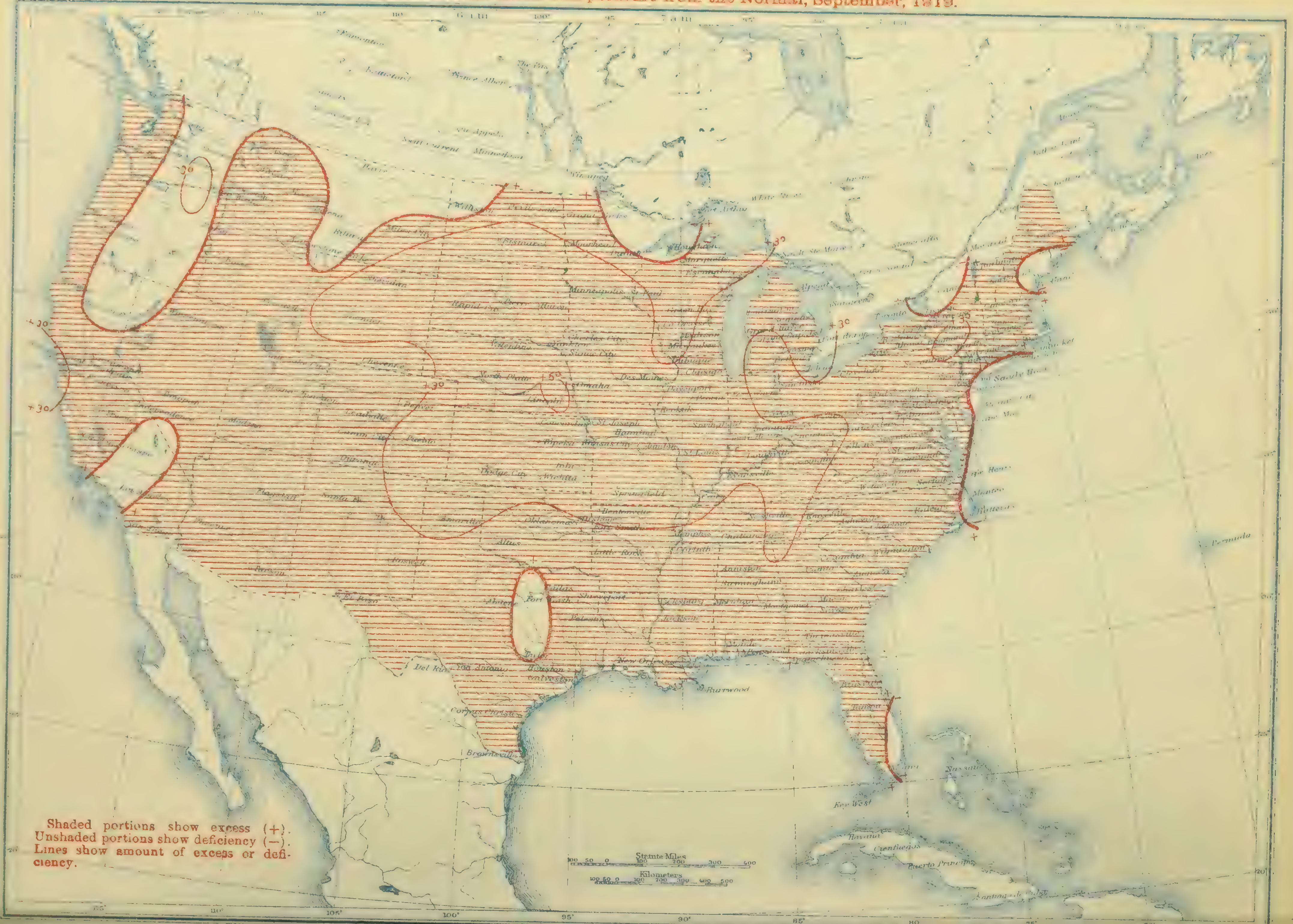
KENTUCKY SECTION

SEPTEMBER, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 31, 1919

Departure of the Mean Temperature from the Normal, September, 1919.



Shaded portions show excess (+). Unshaded portions show deficiency (—). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., SEPTEMBER, 1919. No. 9

GENERAL SUMMARY.

High temperature and drought characterized the weather during the first three weeks. Over the principal agricultural districts, practically no rain occurred in this period. The effects of the drought, as seen in the premature ripening of corn and tobacco, the deterioration of all late crops, and the serious shortage of stock water, became more pronounced daily. The late crops of corn and potatoes were cut short, for the drought was most intense during the period when they should have been making their best growth. Late tobacco was delayed by the dry weather, but the plants were still in condition to develop considerably when rain came; although a full crop was impossible. A serious feature of the drought was its interference with the preparation of the soil for fall grains, which threatened to reduce the acreage in wheat. The dry weather was ideal for saving the corn and tobacco crops, and also for air curing tobacco already housed. So rapid and satisfactory was the curing process that some farmers had begun stripping by the end of the month.

The rains of the 19th-22d broke the drought in most districts, but only the latest corn and tobacco were benefited. Some tobacco took a second growth and was cut green, being injured rather than helped by the rains. Some of it was allowed to stand, especially in the "dark" district in the western counties, and take the chance of maturing before frost. Good progress was made in fall plowing during the last week, while pastures revived and stock water was replenished; but for all these the need for rain was again evident by the end of the month.

PRESSURE.

During practically all the month high pressure dominated weather conditions, the crests lying much of the time to the south or east. The only real break in the high pressure occurred in the period 18th-22d. A low pressure area developed over the Middle West on the 18th, bringing scattered showers to this section, and was followed immediately by an extensive disturbance which appeared over the upper Mississippi Valley on the 20th. This "low" moved slowly eastward causing the general rains over this State on the 21st and 22d, which broke the long drought.

The mean sea-level pressure based on the records of two stations, was 30.07 inches. The extremes were 30.28 inches at Louisville on the 7th and at Lexington on the 28th, and 29.73 inches on the 19th at both stations.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 71.5°, which is 1.5° above normal. Except for a few cool days at the beginning of the month, high temperatures prevailed almost continuously during the first three weeks, maxima ranging from 90° to 100° on most days. A change to cooler occurred with the rains of the 21st-22d, which continued for a few days, but high temperatures were again reached on the 30th. The extremes were 102° on the 10th at Earlington, and 40° at Taylorsville on the 27th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 54 stations, averaged 1.69 inches, which is 1.07 inches less than normal. A few scattered showers occurred on the 11th, but they were light except in the mountain section. General rains occurred over the State in the period 19th-22d, many stations reporting from 1.00 to 2.00 inches on the 21st and 22d. These rains fell in numerous showers, with sufficient time for absorption by the soil. Except in a limited area in the south central counties, which received nearly the normal amount, the distribution over the State was fairly regular. Over a large area along the Ohio River from the Salt to the lower Cumberland, less than an inch occurred; while over the east-central counties amounts ranged generally from 1.00 to 2.00 inches. Amounts at the various stations ranged between 0.56 inch at Earlington and 3.65 inches at Franklin.

WIND.

The total wind movement at Louisville was 7,186 miles, and at Lexington 8,457 miles, with average hourly velocities of 10.0 and 11.7 miles, respectively. The maximum velocity for five minutes was at the rate of 46 miles from the north on the 11th at Louisville, and 48 miles from the southwest on the 19th at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 12 noon 55 per cent, and at 7 p. m. 58 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 83 and at Lexington 72.

MISCELLANEOUS

Sept. 2.—Much tobacco was reported ruined by hail near Princeton.

Sept. 11.—While working in the field near Richmond, one man was killed and another rendered unconscious by lightning.

Sept 19.—Severe drought conditions were reported from the Greensburg, Harrodsburg, Lebanon and many other districts, with water shortage becoming so acute that extreme precautions were necessary for fire protection. In some instances upland corn was so poor that it was being pastured, and tobacco fields promised so little that they had been abandoned.

Rivers.—Pool stages prevailed in all streams that are controlled by dams, and in other streams stages were very low during the month.

COMPARATIVE DATA FOR SEPTEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average	Departure from 30-year normal.	No. of days with .01 in or more.
1889	72.1	+2.1	101	36	1.23	−1.53	..
1890	67.0	−3.0	95	36	2.71	−0.05	..
1891	69.5	−0.5	97	42	1.89	−0.87	.
1892	68.5	−1.5	93	38	2.68	−0.08	..
1893	69.6	−0.4	99	35	3.24	+0.48	.
1894	71.7	+1.7	98	37	2.71	−0.05	..
1895	73.4	+3.4	101	27	1.10	−1.66	3
1896	68.6	−1.4	100	30	3.77	+1.01	7
1897	72.8	+2.8	105	31	0.21	−2.56	1
1898	73.4	+3.4	103	42	4.36	+1.60	9
1899	68.7	−1.3	105	27	1.66	−1.10	5
1900	74.6	+4.6	102	35	2.25	−0.51	6
1901	68.1	−1.9	98	33	3.57	+0.81	6
1902	67.3	−2.7	97	29	4.01	+1.25	10
1903	69.1	−0.9	100	32	0.91	−1.85	4
1904	71.1	+1.1	99	34	2.58	−0.18	8
1905	70.2	+0.2	95	36	2.61	−0.15	6
1906	73.0	+3.0	95	45	6.15	+3.39	13
1907	69.1	−0.9	102	35	3.00	+0.24	6
1908	71.6	+1.6	101	30	1.03	−1.73	3
1909	67.7	−2.3	97	32	2.51	−0.25	6
1910	71.8	+1.8	99	38	4.41	+1.65	9
1911	74.3	+4.3	99	46	3.71	+0.95	10
1912	71.0	+1.0	103	33	2.80	+0.04	7
1913	69.6	−0.4	106	29	2.49	−0.27	9
1914	67.8	−2.2	97	36	2.96	+0.20	6
1915	70.7	+0.7	99	32	3.32	+0.56	7
1916	67.2	−2.8	98	32	3.48	+0.72	6
1917	67.7	−2.3	98	34	2.56	−0.20	5
1918	62.8	−7.2	92	30	2.94	+0.18	8
1919	71.5	+1.5	102	40	1.69	−1.07	4

Climatological data for September, 1919.

Stations.	Counties.	Elevation, feet	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	71.8	+ 1.2	100	10	41	24	47	1.00	−1.52	0.45	0	3	24	4	2	w.	Miss Addie B. Taylor.
Bardwell	Ballard	445	37	72.6	+ 1.6	93	10	49	24	29	2.13	−1.02	1.23	0	4	17	8	5	se.	E. W. Horr.
Calhoun	McLean	407	15	73.1	+ 0.9	101	10	45	24	44	0.75	−1.85	0.51	0	4	16	12	2	sw.	W. A. Taylor.
Earlington	Hopkins	420	28	75.0	+ 3.9	102	10	45	24	46	0.56	−2.13	0.45	0	2	24	0	6	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	^{a}72.0	......	99^{a}	10	44^{a}	24	44^{a}	1.32	.....	1.20	0	2	23	5	2	w.	C. R. Lovell.
Henderson	Henderson	327	11	...	...	...	...	...	...	...	1.16	−1.39	0.80	0	3	...	...	...	...	W. W. Shelby.
Hopkinsville	Christian	524	22	73.4	+ 1.5	98	10	45	24	42	1.87	−1.16	1.81	0	2	22	5	3	w.	W. E. Graves.
Marion	Crittenden	571	20	73.4	+ 1.2	95	9†	48	26	56	0.86	−2.18	0.44	0	2	19	5	6	sw.	B. C. Paris.
Mayfield	Graves	364	9	71.6	+ 0.5	95	10	48	24	39	1.77	−1.06	1.52	0	3	11	15	1	s.	J. N. Davis.
Owensboro	Daviess	479	22	72.2	+ 1.5	96	10	46	24	38	0.92	−1.90	0.50	0	5	20	5	5	se.	Henry S. Berry.
Paducah (near)	McCracken	341	19	73.5	− 0.5	98	10	50	24	40	1.72	−1.25	1.40	0	2	24	4	2	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{b}72.3	+ 0.9	98^{b}	10	44^{b}	24	38^{b}	1.10	−1.64	1.00	0	3	17^{b}	0^{b}	11^{b}	n.	Ray Baker.
Russellville	Logan	590	6	71.0	0.5	94	12	46	24	40	3.13	+0.05	2.80	0	3	23	5	2	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	69.2	+ 1.5	93	10	45	24	36	2.30	−0.86	1.20	0	3	11	6	13	w.	Taylor Davis.
Anchorage	Jefferson	700	18	69.9	+ 0.8	97	10	43	2†	42	2.09	−0.72	1.00	0	4	24	5	1	sw.	C. E. Barret.
Bardstown	Nelson	637	22	72.0	+ 0.1	98	10	45	1†	38	1.28	−1.62	0.98	0	4	27	0	3	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	74.0	− 2.3	100	10	49	2†	40	2.89	−0.24	1.80	0	3	25	4	1	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	...	...	...	...	...	...	...	2.04	......	1.72	0	3	...	...	...	...	James H. Young.
Burnside	Pulaski	773	26	...	...	...	...	...	...	...	1.90	−1.36	1.54	0	2	...	...	...	...	F. E. Bradshaw.
Carrollton (Lock No.)	Carroll	492	20	...	...	...	...	...	...	...	1.81	−1.02	0.72	0	4	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	5	...	...	...	...	...	...	...	0.86	......	0.46	0	4	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eubank	Pulaski	1177	24	69.2	+ 0.5	94	10	42	24	41	2.03	−1.49	1.50	0	2	16	12	2	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	71.2	+ 2.6	94	9†	45	27	37	1.77	−1.09	1.20	0	3	21	5	4	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	73.4	+ 1.4	98	9†	47	24	40	3.65	+0.29	2.85	0	2	26	2	2	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	69.5	0.5	94	8†	42	2†	46	1.33	−1.73	1.16	0	3	15	5	10	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	...	...	...	...	...	...	...	1.23	−1.65	0.89	0	4	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	21	71.9	+ 1.5	94	10	46	24	32	1.21	−1.78	0.58	0	3	22	3	5	sw.	W. J. Piggott.
Junction City	Boyle	985	25	70.0	+ 0.4	97	10	41	12	44	1.75	−1.27	1.05	0	6	21	6	3	sw.	Prof. E. L. Grubbs.
Lebanon	Marion	754	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leitchfield	Grayson	635	23	71.0	+ 1.2	95	10	44	24	36	0.82	−2.82	0.74	0	3	22	6	2	sw.	John E. Stone.
Lexington	Fayette	989	31	71.5	+ 3.6	92	10	49	26	29	1.12	−1.30	0.70	0	5	18	6	6	sw.	U. S. Weather Bureau.
Louisville	Jefferson	525	46	73.0	+ 3.1	95	10	49	26	32	2.53	−0.10	1.31	0	5	20	7	3	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	9	70.3	+ 2.3	92	10	46	26	34	2.60	−0.57	1.30	0	4	21	4	5	s.	Wm. I. Hunt.
St. John	Hardin	777	22	71.6	+ 2.5	100	10	42	24	42	0.76	−2.36	0.66	0	2	27	0	3	......	Sisters of Loretto.
Scott¶	Kenton	900	21	71.0	+ 1.5	97	9†	41	27	45	2.14	−0.41	0.84	0	5	15	10	5	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	68.8	− 0.4	95	10	44	2†	40	1.72	−1.13	0.80	0	5	22	4	4	sw.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	68.8	+ 0.6	96	10	40	27	42	1.39	−1.06	0.64	0	5	21	5	4	sw.	E. D. Bourne.
Williamstown	Grant	913	16	73.3	+ 4.9	99	9	46	26	40	1.78	−1.31	1.02	0	6	11	15	4	......	Miss Rose Carter.
Woodbury	Butler	533	1	...	...	...	...	...	...	...	1.39	......	1.15	0	3	...	...	...	......	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	70.8	+ 1.7	99	10	42	27	49	1.74	−1.31	0.61	0	4	18	7	5	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	71.3	+ 2.0	95	20	43	2†	43	1.13	−1.53	0.61	0	4	23	3	4	sw.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	531	30	...	...	...	...	...	...	...	1.72	−0.88	0.55	0	7	...	...	...	......	Forester Farley.
Cynthiana	Harrison	684	1	...	...	...	...	...	...	...	2.60	......	0.92	0	5	...	...	...	......	P. H. Kehoe.
Falmouth	Pendleton	600	30	...	...	...	...	...	...	...	2.21	−0.25	1.17	0	6	20	5	5	s.	J. V. Oldham.
Farmers	Rowan	668	11	69.4	+ 1.7	97	10	43	24	42	1.30	−1.64	0.40	0	4	20	10	0	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	......	Will Ward Duffield.
Jackson	Breathitt	776	7	...	...	...	...	...	...	...	2.22	−0.36	0.85	0	4	...	...	...	......	Jas. L. McCoy.
London	Laurel	1190	4	...	...	...	...	...	...	...	1.40	.....	1.25	0	2	...	...	...	......	C. R. Lee.
Louisa	Lawrence	581	15	...	...	...	...	...	...	...	2.59	+0.02	1.02	0	7	...	...	...	......	Miss Carrie S. Adams.
Maysville	Mason	524	21	73.0	+ 3.4	100	8†	43	13	43	1.23	−1.40	0.60	0	5	21	5	4	nw.	Harry M. Robinson.
Middlesboro	Bell	1128	21	69.6	+ 0.8	94	9	45	27	42	0.72	−2.03	0.56	0	2	20	10	0	......	B. H. Perkins.
Mount Sterling	Montgomery	930	29	70.0	+ 2.4	96	10	45	2†	41	2.12	−0.77	0.98	0	4	22	4	4	w.	W. R. McKee.
Pikeville	Pike	634	13	...	...	...	...	...	...	...	3.01	+0.04	1.72	0	5	...	...	...	......	I. M. Williams.
Richmond	Madison	926	24	72.6	+ 2.0	96	10	48	3	37	2.21	−0.43	0.90	0	5	23	0	7	.....	J. W. Crooke.
Vanceburg	Lewis	525	...	...	...	...	...	...	...	...	1.30	......	0.48	0	5	...	...	...	......	Samuel Johnson.
Weeksbury	Floyd	1216	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	......	P. V. Johnson.
Williamsburg	Whitley	939	21	70.8	+ 0.2	95	10	41	13	47	1.10	−2.26	0.63	0	2	19	6	5	s.	N. C. Jones.
State averages and extremes	......	...	...	71.5	......	102	10	40	27	49	1.69	......	2.85	0	4	20	6	4	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post office address Normal Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky

Daily Precipitation for September, 1919.

Day of month.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Western Division.																																
Beaver Dam	G																					[illegible]	[illegible]	[illegible]								1.00
Blandville	M							.40													.19	1.23	.31							T		[illegible]
Calhoun	G								T			[illegible]							[illegible]	[illegible]	[illegible]	[illegible]										[illegible]
Earlington	G																					T	.45	.11								[illegible]
Greenville	G																			[illegible]		[illegible]										[illegible]
Henderson	O											.21										[illegible]	.80	.15								[illegible]
Hopkinsville	C																			T		T.	1.81	.06								[illegible]
Marion	O																					[illegible]	.44									[illegible]
Mayfield	M																					[illegible]	[illegible]									1.77
Owensboro	O	.09								T.		.15								[illegible]	T.	[illegible]	[illegible]									0.92
Paducah (near)	O																					1.40	.32									1.72
Princeton	G																			T		.01	1.00	[illegible]							[illegible]	1.10
Russellville	G																					.23	2.80	[illegible]								
Central Division.																																
Alpha	C																				.90	.20	1.20									[illegible]
Anchorage	O										T									1.00	T	.91	.15							.03		2.09
Bardstown	S												.05							.10		.98	.15									1.28
Bowling Green	G																			T.		T	1.80	1.02							.07	2.89
Brownsville	G																				.13		1.72	.19								2.04
Burnside	C																					T	1.54	.36								1.90
Carrollton (Lock No. 1)	O																			T	.54	.35	.72	.20								1.81
Cloverport	O									T		.04									.25	T	.46	.11								0.86
Edmonton	G																															......
Eubank	C																						1.50	.53								2.03
Frankfort	K											T.									T	.47	1.20	.10								1.77
Franklin	G																					.80	2.85									[illegible]
Greensburg	G										T										.06	.11	1.16									1.33
High Bridge	K																				.59	.06	.17	.14								[illegible]
Irvington	O											T							T	.40		.58	.23							T.		1.21
Junction City	K																			.03	.45	.11	1.05	.09	.02							1.75
Lebanon	S																															......
Leitchfield	G						T													.08		[illegible]	.74									0.82
Lexington ***	K										T								T	.32	.04	.60	.15	.01								1.12
Louisville ***	O										.01								T	1.13		1.11	.24							.04		2.53
Do. (Cherokee Park)	O											T								1.30			1.22	.03						.05		2.60
St. John	S											T								T	T	T.	.66	.10								0.76
Scott	L										T	.61							.02	.16	T	.84	.51									2.14
Shelbyville	S																				.57	.16	.80	.15							.04	1.72
Taylorsville	S								T	T.		T							T	.31	.10	.64	.30									1.39
Williamstown	L											.35								.04	.10		.23	1.02								1.78
Woodbury	G	.04																			.15		1.15	.09								[illegible]
Eastern Division.																																
Beattyville‖	K											T.	.09									.48		.56	.61							1.74
Berea	K										T.										T.	.09	.27	.61	.16							1.13
Catlettsburg‖	B											.38	.55								.01	.20		.20	.35	.03						1.72
Cynthiana‖	L																			.85		.25	.30	.95	.25	T.	T					2.60
Falmouth‖	L												.34							.01	.01	.15		1.17	.53							2.21
Farmers	L												.40										.30	.20	.40							1.30
Harlan	K										.09												.02									......
Jackson	K												.40									.37		.85	.60							2.22
London	C																							1.25	.15							1.40
Louisa‖	B											.10	.30							T.	.03	.63		.48	1.02	.03						2.59
Maysville‖	O												.07							.03	T.	.25		.60	.28							1.23
Middlesboro	C																							.16	.56							0.72
Mount Sterling‖	L												.38	T.							T.	.48	.98		.28							2.12
Pikeville	B												1.72									.25	.20	.32	.52							3.01
Richmond‖	K												.09									.67	.43	.12	.90							2.21
Vanceburg	O												.27							.03		.26		.48	.28							1.32
Weeksbury	B																															......
Williamsburg‖	C													T									T.	.47	.63	T						1.10

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

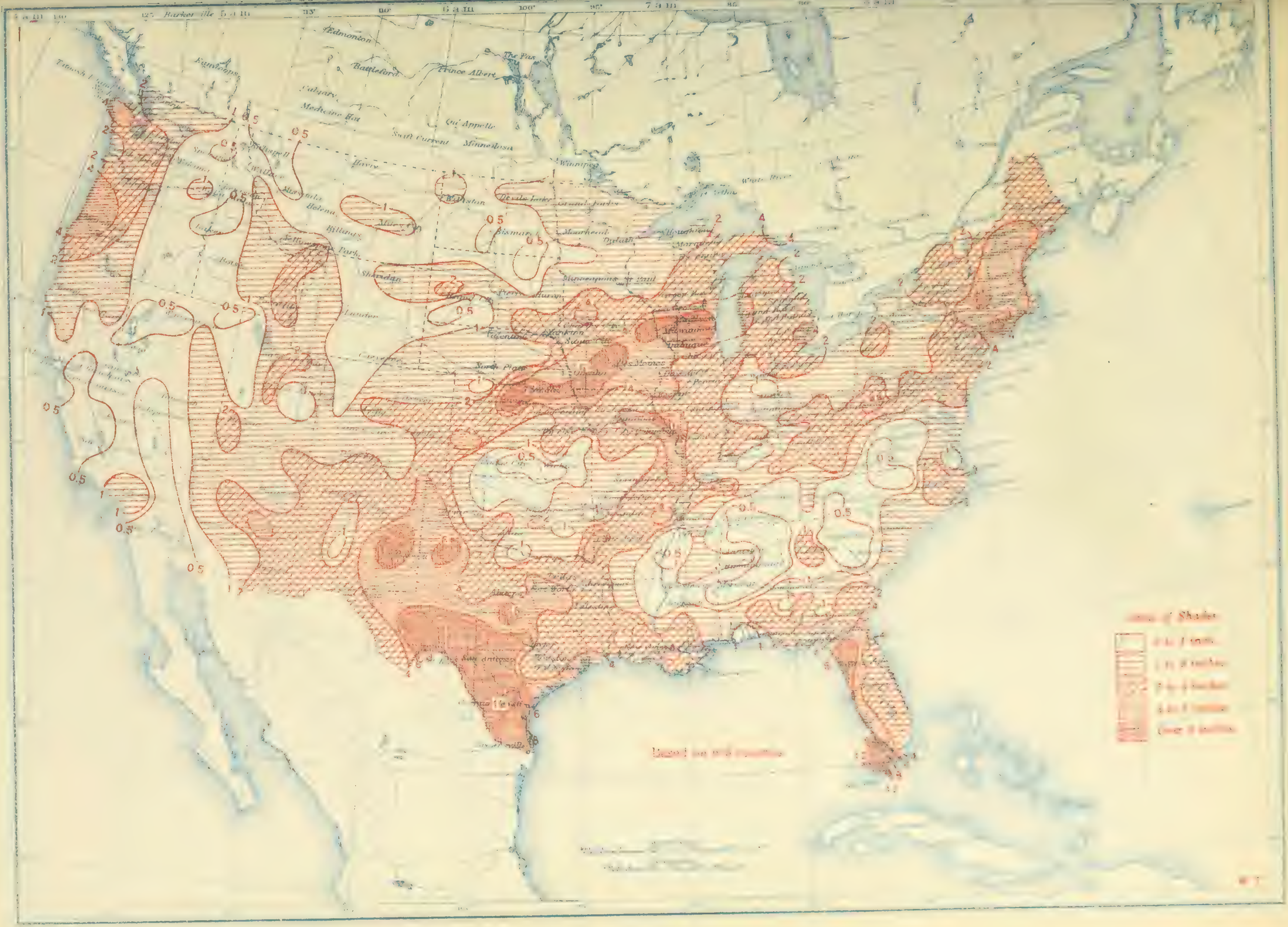
Daily temperatures for September, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	80	83	80	90	93	94	94	97	98	100	90	79	88	95	93	92	92	95	94	90	85	74	75	82	87	80	90	90	87	93	..	88.7
	Minimum	46	44	45	58	55	57	63	65	65	66	66	49	43	52	60	56	46	62	58	67	70	63	52	41	48	43	43	55	49	58	..	54.8
Blandville	Maximum	75	77	81	83	86	87	87	88	89	93	87	75	80	87	90	88	89	90	91	82	76	73	72	75	78	75	82	82	82	86	..	82.9
	Minimum	53	55	55	56	61	66	68	71	71	71	71	58	52	61	66	67	63	70	77	70	69	60	56	49	55	51	53	62	67	63	..	62.2
Calhoun	Maximum	76	81	86	90	93	93	92	95	100	101	94	84	88	95	95	94	93	95	94	90	82	75	75	81	87	80	90	89	83	94	..	88.8
	Minimum	51	48	49	51	58	59	64	65	67	68	66	51	47	51	63	60	52	63	71	67	71	60	55	45	50	47	47	55	62	59	..	57.4
Earlington	Maximum	82	82	90	92	96	96	94	97	98	102	98	86	92	97	95	95	96	97	96	91	83	72	77	84	89	85	92	98	88	97	..	91.2
	Minimum	48	47	47	53	57	61	65	69	67	70	68	54	50	53	64	58	52	64	77	71	73	62	57	45	54	47	46	58	65	60	..	58.7
Greenville	Maximum	78	80	85	87	92	94	92	93	96	99	89	81	89	93	92	91	91	96	93	91	..	85	73	79	85	84	90	86	87	92	..	^{a}88.4
	Minimum	50	46	47	52	56	54	61	63	65	67	65	51	47	52	61	52	50	62	69	69	..	60	57	44	50	47	46	54	55	59	..	^{a}55.6
Hopkinsville	Maximum	81	83	87	79	92	91	93	96	97	98	91	85	88	92	93	93	93	95	93	88	83	73	76	82	85	82	89	88	84	94	..	88.1
	Minimum	52	49	50	52	58	60	66	65	67	68	69	53	54	64	62	56	51	66	73	65	71	61	58	49	48	51	49	56	57	68	..	58.8
Marion	Maximum	77	81	84	87	88	90	89	91	95	95	90	81	86	90	91	90	90	92	91	85	79	71	71	71	83	79	86	85	83	80	..	85.0
	Minimum	51	53	55	62	62	67	68	72	69	72	69	54	50	62	67	65	60	68	75	70	69	59	56	50	54	48	56	65	66	64	..	61.9
Mayfield §§	Maximum	76	77	81	85	87	88	88	92	91	95	88	77	83	91	94	91	92	92	91	90	89	63	73	77	82	78	85	84	83	89	..	85.1
	Minimum	51	50	51	49	51	52	65	69	69	68	68	57	51	52	63	62	59	59	65	68	71	61	56	48	49	51	50	52	64	60	..	58.0
Owensboro	Maximum	82	83	85	87	89	91	92	94	96	98	92	90	88	89	92	90	92	94	96	88	88	74	72	80	82	85	88	87	89	90	..	88.1
	Minimum	52	53	55	54	55	60	66	69	64	70	66	50	50	60	67	68	63	65	65	63	68	60	56	50	51	52	55	54	53	54	..	58.9
Paducah (Lone Oak)	Maximum	78	80	84	87	91	..	93	95	96	98	90	78	86	92	92	89	90	95	..	96	83	69	72	79	81	78	80	86	80	89	..	^{b}86.0
	Minimum	60	48	50	53	58	59	..	65	66	67	70	55	54	55	62	58	52	65	73	..	76	68	58	44	46	50	47	63	60	59	..	^{b}58.6
Princeton §§	Maximum	75	77	80	85	88	86	88	92	93	94	86	79	90	92	93	91	90	91	90	88	83	69	76	75	81	75	84	86	81	85	..	84.8
	Minimum	51	47	49	53	59	61	69	66	66	69	68	54	51	52	53	58	50	52	66	66	67	67	59	46	50	51	50	50	57	58	..	57.2
Russellville §§	Maximum	78	79	82	85	88	90	90	91	94	96	78	69	80	89	88	87	87	91	90	89	82	79	71	78	81	78	87	87	84	89	..	84.6
	Minimum	56	50	52	52	60	61	62	67	68	69	67	55	53	63	59	66	57	66	73	68	68	69	57	46	50	50	49	59	64	62	..	59.9
Central Division.																																	
Alpha	Maximum	73	75	78	84	89	86	86	88	89	93	90	76	82	86	82	88	86	83	82	78	76	73	70	72	76	73	82	82	80	87	..	81.5
	Minimum	50	48	47	50	54	61	69	60	65	73	69	51	46	51	54	56	50	59	75	73	72	68	61	45	47	49	49	50	51	61	..	56.8
Anchorage	Maximum	79	81	78	83	90	92	91	94	96	97	90	78	83	90	91	90	88	81	87	92	83	71	73	74	82	74	85	87	85	88	..	85.1
	Minimum	46	43	46	50	53	55	65	61	66	65	65	43	46	55	56	56	46	63	67	65	65	61	54	44	48	47	45	51	56	58	..	54.7
Bardstown	Maximum	70	80	85	88	90	94	92	95	96	98	90	77	89	92	93	91	88	84	91	94	83	73	73	81	84	87	88	89	86	91	..	87.1
	Minimum	45	50	47	53	57	60	64	63	62	65	69	51	52	55	60	53	50	63	65	67	70	62	60	65	49	49	45	54	65	60	..	57.0
Bowling Green	Maximum	82	85	89	91	93	93	95	96	97	100	92	89	90	93	95	92	94	93	93	92	86	80	75	82	84	82	89	87	84	81	..	89.1
	Minimum	51	49	51	55	61	61	63	65	68	70	70	53	52	54	62	60	62	62	63	68	72	64	60	56	52	52	49	49	55	55	..	58.8
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	73	76	80	82	89	90	88	91	92	94	89	74	84	88	90	89	86	81	88	90	80	84	72	75	80	74	85	84	84	86	..	83.9
	Minimum	52	45	45	49	49	58	60	59	62	66	70	49	47	47	54	54	48	61	66	67	69	67	57	42	44	50	45	54	50	51	..	54.6
Frankfort	Maximum	76	79	83	83	86	91	91	92	94	94	94	85	80	86	90	88	85	84	87	89	83	81	71	76	82	81	82	85	82	86	..	84.9
	Minimum	51	46	49	54	58	59	62	63	68	69	71	54	51	51	58	59	51	65	64	69	70	63	61	48	51	50	45	53	54	60	..	57.6
Franklin	Maximum	77	79	83	88	90	90	90	95	98	98	91	80	86	92	94	93	91	95	91	92	84	78	75	79	84	77	88	82	87	89	..	87.2
	Minimum	51	48	50	55	50	65	66	68	68	70	60	55	50	57	67	63	55	62	73	69	70	64	64	47	55	52	49	62	59	61	..	59.5
Greensburg	Maximum	76	78	83	88	89	91	89	94	94	92	93	83	84	89	92	90	88	85	91	91	83	78	73	75	81	75	86	84	86	87	..	85.6
	Minimum	45	42	44	48	54	56	59	58	62	64	69	51	45	47	46	52	45	58	63	68	71	66	59	42	43	49	43	49	49	56	..	53.4
Irvington	Maximum	76	72	81	83	86	90	89	90	93	94	91	80	81	87	88	87	86	85	88	89	85	74	71	76	80	74	84	85	83	86	..	84.0
	Minimum	52	50	51	57	61	62	67	67	69	71	74	51	50	56	61	61	54	66	68	70	73	62	59	46	54	49	47	62	63	62	..	59.8
Junction City	Maximum	76	79	83	89	88	90	89	93	96	97	93	78	84	89	93	90	88	86	90	90	78	77	75	77	82	77	86	86	85	89	..	85.8
	Minimum	48	42	44	54	50	57	65	58	65	70	69	41	42	45	55	57	49	57	60	68	68	65	59	42	46	46	42	54	50	60	..	54.3
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	77	79	83	86	89	89	88	90	93	95	88	83	84	88	89	72	87	88	90	90	83	80	71	76	82	77	86	85	81	88	..	84.6
	Minimum	51	48	49	53	59	60	64	64	66	67	67	53	51	55	60	55	51	66	69	66	70	61	59	44	49	48	47	56	57	58	..	57.4
Lexington	Maximum	72	75	81	82	84	89	88	91	92	92	83	71	78	86	87	85	82	77	83	87	76	70	68	74	79	70	83	85	79	85	..	81.1
	Minimum	52	59	59	65	61	69	73	72	73	74	60	52	50	58	66	64	60	65	64	69	70	60	56	52	56	49	54	63	65	66	..	61.9
Louisville	Maximum	77	80	84	81	87	91	90	92	94	95	86	75	83	88	89	87	85	81	85	89	82	71	71	77	81	75	85	85	82	86	..	83.8
	Minimum	54	56	57	60	62	64	70	72	75	76	64	54	53	58	67	67	60	67	69	72	68	61	60	53	56	49	53	60	66	66	..	62.3
Do (Cherokee Park)	Maximum	74	77	79	79	84	88	88	89	91	92	88	81	78	85	87	85	82	79	84	87	81	74	70	74	78	73	80	82	79	82	..	81.7
	Minimum	51	49	51	56	59	60	65	66	69	71	70	52	51	51	62	60	54	64	68	69	73	62	58	50	55	46	47	54	61	62	..	58.9
St John	Maximum	78	80	84	88	92	92	91	95	98	100	90	79	84	92	89	92	89	87	93	91	82	71	72	79	85	71	87	87	87	90	..	86.5
	Minimum	49	46	48	52	58	58	65	61	66	67	67	51	49	52	57	62	50	65	68	67	73	67	58	42	46	48	45	52	53	57	..	56.6
Scott	Maximum	75	81	84	78	88	92	93	92	97	97	88	78	80	87	90	84	82	76	84	89	82	72	74	78	79	72	86	86	83	87	..	83.8
	Minimum	49	46	49	57	56	59	66	67	71	71	69	52	47	49	59	68	52	62	64	69	69	59	58	50	56	45	41	53	67	62	..	58.1
Shelbyville	Maximum	80	84	90	87	89	84	86	92	93	95	85	80	83	85	86	85	85	79	82	83	78	78	68	75	76	75	82	80	80	87	..	82.7
	Minimum	45	44	44	51	56	59	61	62	62	66	66	49	45	50	56	55	47	63	65	72	67	65	56	44	47	45	44	53	55	57	..	55.0
Taylorsville	Maximum	75	78	82	84	87	90	89	92	94	96	87	81	80	87	89	88	85	80	88	89	87	91	70	76	82	72	82	84	80	85	..	84.3
	Minimum	45	41	45	49	53	55	58	57	64	64	69	45	47	45	53	54	45	60	60	68	67	61	59	43	45	49	40	48	51	56	..	53.2
Williamstown	Maximum	80	83	88	85	92	93	94	95	99	97	91	82	84	91	91	89	84	79	87	91	80	76	73	79	84	77	90	90	84	90	..	86.6
	Minimum	56	53	53	60	58	64	70	70	71	73	68	49	50	54	64	61	54	61	65	69	70	61	59	50	55	46	50	59	64	64	..	60.0
Eastern Division.																																	
Beattyville	Maximum	75	80	85	90	93	95	96	95	97	99	92	78	83	92	94	92	90	82	93	98	91	79	74	82	85	75	89	89	90	92	..	88.2
	Minimum	49	45	46	49	54	57	61	60	60	69	69	47	43	43	52	53	48	53	56	61	64	68	59	47	46	47	42	49	49	60	..	53.5
Berea	Maximum	85	78	88	94	92	93	93	93	92	93	89	77	82	84	90	89	84	76	75	95	76	69	75	77	83	72	88	89	84	87	..	84.7
	Minimum	46	43	67	57	62	61	64	64	64	70	71	50	43	51	61	59	49	61	71	70	69	63	57	45	53	50	45	60	52	58	..	57.9
Farmers	Maximum	79	81	85	80	89	93	90	89	96	97	88	85	84	80	90	82	89	86	89	89	88	77	73	80	83	81	89	83	89	90	..	85.8
	Minimum	44	48	50	44	50	52	56	56	60	65	67	52	50	50	50	48	53	54	63	61	65	66	59	43	50	45	47	45	45	53	..	53.0
Harlan	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	79	83	89	85	90	96	94	100	100	98	94	84	85	91	95	89	88	83	88	93	87	77	74	80	86	77	87	90	88	91	..	88.0
	Minimum	52	50	51	55	64	60	64	64	68	69	69	53	43	48	58	56	52	62	65	70	71	71	60	49	53	48	46	52	55	61	..	58.0
Middlesboro	Maximum	76	79	81	85	88	90	89	90	94	93	93	82	84	87	90	89	87	85	84	86	84	81	76	77	80	80	85	85	85	87	..	85.1
	Minimum	49	46	48	49	53	59	61	61	62	65	66	61	42	45	52	55	47	51	54	60	67	70	60	51	46	47	45	51	47	50	..	54.0
Mount Sterling	Maximum	73	76	81	85	85	92	92	93	95	96	87	74	78	88	90	85	83	78	88	90	81	74	72	77	82	72	84	82	87	89	..	83.6
	Minimum	52	45	48	51	58	59	64	64	68	69	68	50	49	47	56	54	50	60	60	63	70	69	59	47	50	47	45	52	54	60	..	56.3
Richmond	Maximum	78	81	85	87	88	92	91	93	94	96	90	79	85	89	91	91	88	77	86	91	79	72	74	77	82	78	87	88	86	90	..	85.5
	Minimum	50	49	48	54	59	64	69	72	71	71	74	52	49	52	64	63	57	63	67	69	71	66	60	50	53	49	49	57	57	63	..	59.7
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	79	81	82	86	91	91	93	94	94	95	92	92	88	89	91	92	89	89	89	88	83	80	79	80	80	79	86	83	87	89	..	87.0
	Minimum	53	44	45	47	52	58	56	58	59	65	70	54	41	45	50	53	46	53	68	63	69	68	60	49	43	48	52	58	59	52	..	54.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

^{a}, ^{b}, ^{c}, etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches,



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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

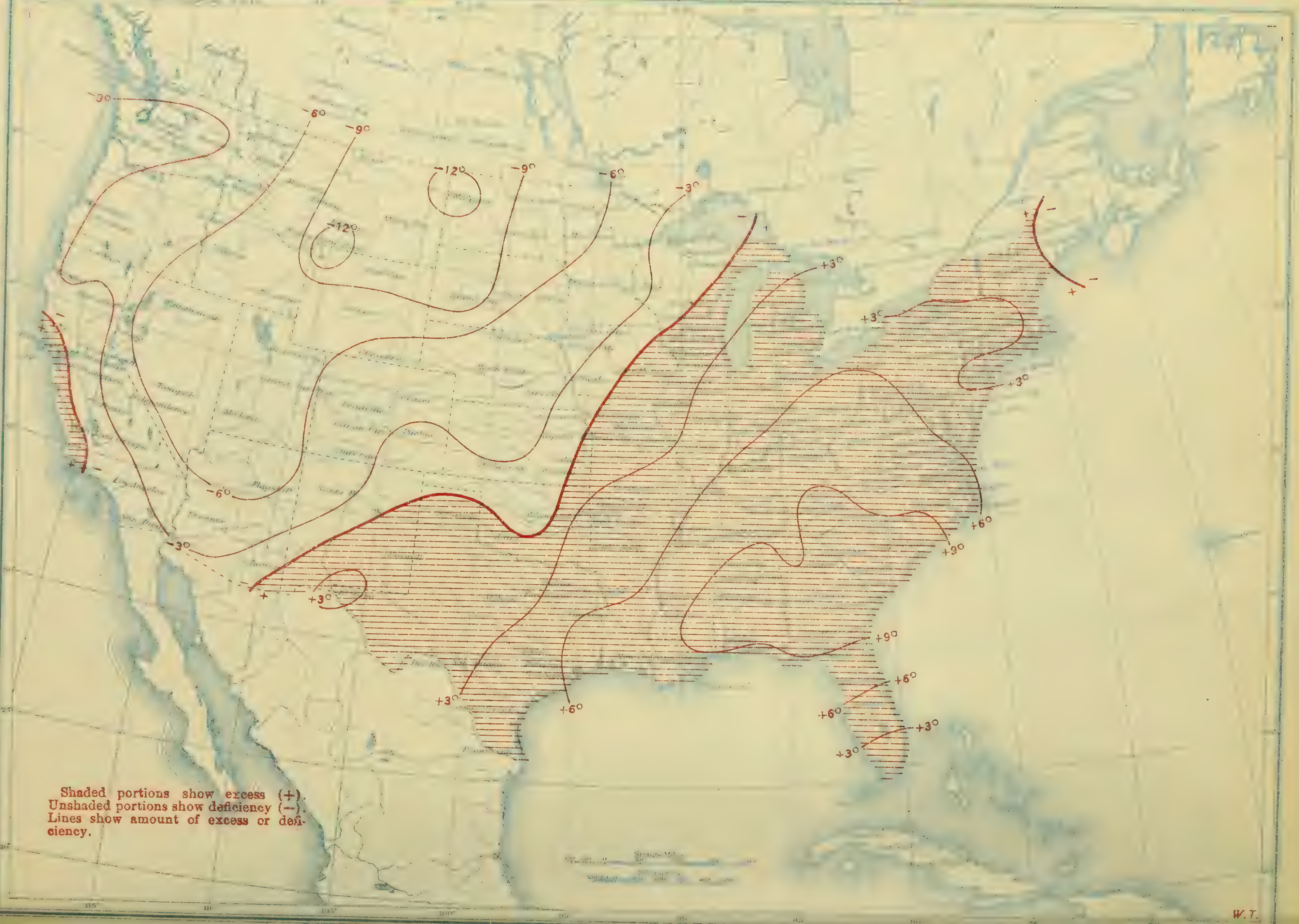
KENTUCKY SECTION

OCTOBER, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 29, 1919.

Departure of the Mean Temperature from the Normal, October, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., October, 1919. No. 10

GENERAL SUMMARY.

The month was the warmest and wettest October on record during the 31 years of State averages. Except on a few days mean daily temperatures were continuously above normal; while the average rainfall was more than three times the normal amount for October. Light frost on the 18th and 19th caused no damage, growth of vegetation continuing without interruption until the end of the month. Pastures grew luxuriantly, and late potatoes were much benefited by the unusual lengthening of the growing season.

During the first week the soil was too dry to be worked satisfactorily, and progress of seeding was slow. General rains set in on the 9th and continued in almost daily showers, with frequent heavy downpours, until the end of the month. The soil became water-soaked and could not be worked, fall seeding practically ceasing with the beginning of the rainy period. The cloudiness and continuous rains delayed maturity of the late crops, and rendered the work of saving them especially difficult and unsatisfactory. Early corn in shock sprouted and rotted badly, while much of the uncut corn fell over and was damaged. Very little progress was made in gathering this crop on account of the soft soil. Flooding of lowlands along headwater streams caused considerable loss to crops in fields. Although the wet weather prevented most outdoor work, it was favorable for tobacco stripping, which proceeded with unusual rapidity.

PRESSURE.

High pressure areas were generally dominant until the 8th. This condition broke up on the 9th with the movement of a strong low pressure area eastward over the Plains States and Mississippi Valley, causing heavy rains in this State. Other "lows" followed in rapid succession, the most important being as follows: on the 11-12th, moving northeastward across the southern States, attended by heavy rains; on the 14th and 15th, shallow but saturated troughs moving over this State with heavy rains; from the 21st to 28th, a succession of troughs and shallow depressions merging into one another, attended by light to moderate rains over the State; and on the 31st a trough moving eastward across the Central Valleys with heavy rains.

The mean sea-level pressure, based on the records of two stations, was 30.10 inches. The extremes were 30.30 inches on the 7th and 29.88 inches on the 27th, both at Louisville.

TEMPERATURE.

The average temperature for the State, 40 stations reporting, was 65.6°, which is 7.8° above normal. On several days mean daily temperatures were from 10° to 12° above normal, especially during the first and last decades. Maximum temperatures in the 90's occurred generally on the first three days, and in the 80's on several other days, particularly in the period 25-27th. The maximum temperature, 98°, is the highest ever recorded for October since State records were established. Minimum temperatures in the 40's occurred in the period 17th-22d, but no freezing temperatures were reported from any part of the State. The extremes were 98° at Earlington on the 1st, and 35° at Farmers on the 18th and 19th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 55 stations, averaged 7.99 inches, which is 5.49 inches in excess of normal for October. This total is not approached by the record of any other October, and it has seldom been exceeded in any month during the past 31 years.

Showers occurred in the period 4-6th, heavy rains in the period 9-17th, and moderate to heavy rains from the 21st to the end of the month. Beginning with the 4th, rain was reported from some part of the State every day until the end of the month. Rainfall of more than one inch in 24 hours occurred at several stations on the 9th, 11-12th, 14-16th, and 21st. Over a wide belt extending from the lower Tennessee to the Licking monthly amounts ranged from 8 to more than 12 inches, and in the southeastern counties from 8 to 10 inches. In other districts amounts were generally between 5 and 8 inches. Monthly totals at the various stations ranged between 4.88 inches at Falmouth, and 12.46 inches at Bardstown.

WIND.

The total wind movement at Louisville was 7,747 miles, and at Lexington 8,972 miles, with average hourly velocities of 10.4 and 12.1 miles, respectively. The maximum velocity for five minutes was at the rate of 44 miles from the south at Louisville, and 38 miles from the southwest at Lexington, on the 9th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 89 per cent, at 12 noon 75 per cent, and at 7 p. m. 82 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 42 and at Lexington 27, both unusually low records for October.

MISCELLANEOUS

Oct. 9—Barns were blown down, and standing crops damaged by heavy rains in Ballard County. A barn was burned by lightning in Kenton County.

Rivers.—Stages were generally low in the Ohio until the 13th, when a rise began in the upper reaches, continuing in the lower river until the 21st. Another rise, rapid but of short duration, occurred between Portsmouth and Louisville on the 28-29th, due to heavy rains over eastern Kentucky and southern Ohio. Creeks and headwater streams in the Blue Grass region and the Green River district overflowed their banks on the 31st, causing much damage to crops.

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain.
1889	52.0	−5.8	89	23	2.42	−0.08	
1890	55.7	−2.1	87	23	2.94	+0.44	..
1891	54.8	−3.0	92	21	0.78	−1.72	..
1892	57.3	−0.5	97	19	0.51	−1.99	..
1893	56.4	−1.4	90	19	4.00	+1.50	..
1894	58.6	+0.8	92	25	1.36	−1.14	5
1895	52.2	−5.6	89	14	1.24	−1.26	4
1896	55.8	−2.0	90	25	1.71	−0.79	5
1897	63.2	+5.4	96	26	1.10	−1.40	4
1898	57.1	−0.7	93	21	4.19	+1.69	10
1899	61.3	+3.5	93	26	2.42	−0.08	5
1900	64.5	+6.7	94	29	2.29	−0.21	5
1901	58.1	+0.3	93	25	1.57	−0.93	4
1902	60.1	+2.3	91	25	2.34	−0.16	5
1903	57.7	−0.1	96	19	2.22	−0.28	5
1904	57.2	−0.6	93	20	0.52	−1.98	2
1905	57.0	−0.8	90	25	4.95	+2.45	9
1906	56.9	−0.9	91	20	1.51	−0.99	
1907	55.5	−2.3	93	20	2.97	+0.47	6
1908	57.1	−0.7	92	20	0.71	−1.79	3
1909	55.2	−2.6	94	18	2.11	−0.39	6
1910	61.4	+3.6	96	17	4.45	+1.95	[illegible]
1911	59.9	+2.1	94	27	3.71	+1.21	[illegible]
1912	59.5	+1.7	92	25	1.42	−1.08	4
1913	56.9	−0.9	97	23	3.55	+1.05	[illegible]
1914	59.7	+1.9	91	22	5.10	+2.60	9
1915	60.6	+2.8	[illegible]	27	3.40	+0.90	6
1916	57.6	−0.2	97	24	2.59	+0.09	[illegible]
1917	51.1	−6.7	90	20	3.18	+0.68	7
1918	62.3	+4.5	91	32	3.81	+1.31	[illegible]
1919	65.6	+7.8	98	35	7.99	+5.49	15

Climatological data for October, 1919.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	66.2	+ 8.8	96	1	41	20	37	7.98	+5.54	2.40	0	10	11	9	11	e.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	64.6	+ 6.5	89	2	40	18	28	9.47	+6.47	3.14	0	17	6	6	9	s.	E. W. Horr.
Calhoun	McLean	437	15	65.8	+ 6.5	96	1	40	18	35	7.87	+4.59	1.58	0	14	6	11	14	sw.	W. A. Taylor.
Earlington	Hopkins	420	28	66.6	+ 7.3	93	1	36	18	36	5.79	+3.22	2.27	0	16	12	1	18	s.	Brick Southworth.
Greenville	Muhlenburg	519	2	65.9	......	94	1	39	18	35	9.08	......	3.00	0	9	14	7	10	w.	C. R. Lovell.
Henderson	Henderson	327	11	......	......	......	......	......	......	......	7.59	+4.49	1.50	0	16	......	......	......	......	W. W. Shelby.
Hopkinsville	Christian	524	22	68.0	+ 7.6	95	1	39	18	34	10.47	+7.60	2.61	0	13	6	5	20	s.	W. E. Graves.
Marion	Crittenden	571	20	65.4	+ 6.0	92	1	38	18	30	7.53	+4.99	2.00	0	11	8	12	11	s.	B. C. Paris.
Mayfield	Graves	364	9	a64.1	+ 5.6	91a	1	37a	18	30a	5.50	+2.95	1.35	0	15	6a	7a	17a	s.	J. N. Davis.
Owensboro	Daviess	479	22	63.8	+ 4.8	92	1	41	19	36	7.85	+4.75	1.92	0	12	9	5	17	se.	Henry S. Berry.
Paducah (near)	McCracken	341	19	66.2	+ 5.2	94	3	39	18	37	9.43	+6.70	2.22	0	18	10	2	19	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	i64.0	+ 5.2	92j	2	41i	20	32k	8.51	+6.41	3.02	0	....	7i	0i	14i	......	Ray Baker.
Russellville	Logan	590	6	64.4	......	88	2	39	18	32	5.56	+3.24	1.20	0	11	13	5	13	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	67.6	+ 8.1	85	1	47	18	27	7.35	+3.92	1.40	0	9	6	7	18	w.	Taylor Davis.
Anchorage	Jefferson	700	18	63.2	+ 6.7	93	2	36	19	36	7.24	+4.38	1.25	0	15	10	7	14	sw.	C. E. Barret.
Bardstown	Nelson	637	22	65.4	+ 5.9	95	3	39	19	32	12.46		2.55	0	15	19	0	12	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	67.9	+ 8.7	93	2	40	18	32	6.96	+4.59	1.13	0	14	8	4	19	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	......	......	......	......	......	......	......	7.65	......	1.24	0	18	......	......	......	......	James H. Young.
Burnside	Pulaski	773	26	......	......	......	......	......	......	......	9.71	+7.41	2.35	0	12	......	......	......	......	F. E. Bradshaw.
Carrollton (Lock No.)	Carroll	492	20	......	......	......	......	......	......	......	7.12	+4.47	1.61	0	16	......	......	......	......	Charlie Oliver.
Cloverport	Breckenridge	375	5	......	......	......	......	......	......	......	6.28	......	1.22	0	17	......	......	......	......	W. A. Cockerill.
Edmonton	Metcalfe	600	25	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Eubank	Pulaski	1177	24	a65.8	+ 9.1	89a	1	42a	18	31a	8.44	+6.30	2.60	0	10	6a	6a	18a	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	65.5	+ 9.0	90	2	40	19	30	9.14	+6.67	1.89	0	17	5	4	22	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	68.4	+ 9.1	94	2	40	20	37	8.99	+6.89	2.34	0	14	11	4	16	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	66.2	+ 9.7	91	2	37	18	34	6.37	+3.61	1.32	0	16	4	3	24	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	......	......	......	......	......	......	......	9.15	+6.68	1.45	0	19	......	......	......	......	Miss Lulu Wood.
Irvington	Breckenridge	646	21	65.2	+ 9.6	90	1†	41	18	26	7.37	+4.62	1.33	0	11	9	6	16	sw.	W. J. Piggott.
Junction City	Boyle	985	25	65.6	+ 8.1	91	1	37	18	33	6.38	+4.39	0.95	0	20	8	9	14	se.	Prof. E. L. Grubbs.
Lebanon	Marion	754	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Leitchfield	Grayson	635	23	65.6	+ 7.5	90	1†	41	18	29	10.67	+8.34	3.48	0	13	7	10	14	sw.	John E. Stone.
Lexington	Fayette	989	31	64.0	+ 7.5	89	2	42	18	25	7.95	+5.73	2.22	0	18	4	7	20	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	64.6	+ 6.2	91	1†	43	18	27	6.89	+4.26	2.11	0	14	7	6	18	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	9	64.2	+ 7.0	88	2	40	18	28	5.95	+2.53	1.27	0	14	8	6	17	s.	Wm. I. Hunt.
St. John	Hardin	777	22	65.4	+ 7.8	93	2	40	18	33	10.62	+8.13	3.00	0	16	12	4	15	......	Sisters of Loretto.
Scott ¶	Kenton	900	21	63.2	- 5.4	92	2	38	19†	31	11.13	+8.79	2.05	0	16	4	9	18	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	63.6	+ 6.9	88	1	36	18	37	8.95	+6.53	1.85	0	18	8	7	16	s.	Mrs. Laura A. Burnett.
Taylorsville	Spencer	489	16	63.8	+ 7.8	89	2†	36	19	32	10.33	+7.78	2.29	0	16	8	3	20	s.	E. D. Bourne.
Williamstown	Grant	943	16	a67.2	+10.2	95	1	41a	29	35a	5.80	+2.92	1.20	0	17	5	19	7	......	Miss Rose Carter.
Woodbury	Butler	533	1	......	......	......	......	......	......	......	7.91	......	1.61	0	14	......	......	......	......	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	66.1	+ 9.0	95	2	40	18	39	8.85	+5.69	3.25	0	14	6	5	20	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	a65.9	+ 7.4	94a	3	42a	18	30a	6.62	+3.55	1.21	0	15	8	5	18	sw.	Prof. Chas. D. Lewis.
Catlettsburg ‡	Boyd	534	30	......	......	......	......	......	......	......	5.40	+2.73	1.24	0	16	......	......	......	......	Forester Farley.
Cynthiana	Harrison	684	1	......	......	......	......	......	......	......	8.90	......	1.80	0	11	......	......	......	......	P. H. Kehoe.
Falmouth	Pendleton	600	30	......	......	......	......	......	......	......	4.88	+2.47	1.12	0	16	8	4	19	sw.	J. V. Oldham.
Farmers	Rowan	668	11	64.4	+ 7.8	94	1†	35	18†	41	6.23	+2.90	1.10	0	13	5	22	4	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	n67.6	......	......	......	......	......	......	8.69	......	2.80	0	9	......	......	......	......	Will Ward Duffield.
Jackson	Breathitt	776	7	......	......	......	......	......	......	......	70.4	......	2.30	0	11	......	......	......	......	Jas. L. McCoy.
London	Laurel	1190	4	......	......	......	......	......	......	......	9.71	......	1.50	0	16	......	......	......	......	C. R. Lee.
Louisa	Lawrence	584	15	......	......	......	......	......	......	......	5.93	+3.05	0.85	0	17	......	......	......	......	Miss Carrie S. Adams.
Maysville	Mason	524	21	66.2	+ 9.1	95	1†	41	18	32	6.61	+4.09	1.20	0	14	4	19	8	sw.	Harry M. Robinson.
Middlesboro	Bell	1128	21	67.3	+10.1	92	2	42	8	40	10.01	+7.71	1.85	0	17	12	10	9	......	B. H. Perkins.
Mount Sterling	Montgomery	930	29	65.9	+10.3	92	2	38	18	37	8.61	+5.64	1.70	0	19	11	9	11	w.	W. R. McKee.
Pikeville	Pike	634	13	......	......	......	......	......	......	......	9.34	+6.90	1.62	0	10	......	......	......	......	I. M. Williams.
Richmond	Madison	926	24	67.0	− 8.6	93	1	40	18	30	6.10	+3.29	1.37	0	16	10	1	20	......	J. W. Crooke.
Vanceburg	Lewis	525	......	......	......	......	......	......	......	......	8.11	......	1.48	0	19	......	......	......	......	Samuel Johnson.
Weeksbury	Floyd	1216	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	P. V. Johnson.
Williamsburg	Whitley	939	21	a66.6	+ 7.1	92a	1	40	17	37a	10.12	+7.57	2.80	0	13	5	5	21	w.	N. C. Jones.
State averages and extremes				65.6	......	98	1	35	18†	41	7.99	......	3.65	0	15	8	7	16	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ** Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post office address, Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky

Daily Precipitation for October, 1919.

Stations.		Day of month 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Western Division.																																	
Beaver Dam ‖	G									2.40		1.50	.23		1.60	1.45	.05	.15				.27	.18	.15									7.98
Blandville	M				.21	.39			T	3.14	T.	1.12	.23	.30	.83	.05	.15					.99	.01	.03	.10		.41		.11		.03	1.54	9.64
Calhoun	G				T	.10	.13			1.58		.43	.27		.91	.17	1.20					.92	T	.08	T	T	.41	T	.12		.02	1.50	7.84
Earlington ‖	G						.04	.06		2.27	.12	.33	.42		1.07	.16	.02	.20				.68	.06	.11				.10	.09			.06	5.79
Greenville	G									3.00		1.43	.38		1.78	.32	.35					.75		.27								.76	9.04
Henderson ‖	O						.13			1.50	.09	1.20	.66		.90	.10	.85	.05				.75	.07	.20	T	T	.50	.45	.65			.09	[illegible]
Hopkinsville ‖	C					.21	1.64			2.61		.37	.54	T.	1.84	.55	.27					1.06	T	.39			.16				.06	[illegible]	[illegible]
Marion	O					.11				2.00	T.	.96	.17		1.42	.08						.78		.10	T		.55		.13			1.23	7.53
Mayfield ‖	M					.22	.12			.20	.60	.32	.28		1.25	.10	.05	.38				1.35	.27	.17					.15			.04	5.50
Owensboro ‖	O				T.	.04				1.92	.16	.65	.12		1.10	.16	.65					.82		.09			.64				T	1.56	7.91
Paducah (near)	O				.42	.06	.05			2.22	.08	.67	.28		1.18	.04	.18					1.16	.04	.01	.05	.02	.43		.18			2.36	9.43
Princeton ‖	G						.25			3.02	.75	.73	.27		.95	.37		.63				.75	.01	.15	T.		*		*			.63	8.51
Russellville ‖	G						.80			.50		.25	.75		1.20		.37	.10				.31	.71	.12	.45								5.56
Central Division.																																	
Alpha	C					.60							1.20		1.40	1.00	.30					.30	.10	.25								1.20	6.35
Anchorage	O				.10	.12			T.	1.06	T.	.46	.26		1.25	.16	.76					.63		T		.06	1.03	.05	.06		.21	1.03	7.24
Bardstown ‖	S					.40	.85			1.35		.95	.35		1.75	1.25	.20					.59	.12	.04		.12	1.20		.12		.62	2.55	12.46
Bowling Green ‖	G					.22	.60		.25		.03		.60		.80	1.13	.75					.90	.05	.55		.08					.10	.90	6.96
Brownsville ‖	G						.72			.56	.49	.72	1.24	.06	1.19	.84	.32	.15				.08	.68	.06	.20	.02		.17			.12	.03	7.65
Burnside ‖	C					.33	.99			.15			2.35	.10	.50	1.38	.98	.59					.55	.19	1.60								9.71
Carrollton ‖ (Lock No. 1)	O					.06	.17			.97	.20	.57	.66		1.10	.25	.24	.35					.43			.07		1.61	.07		.20	.17	7.12
Cloverport ‖	O					.02	T.			1.12	.14	.08	.40		1.15	.16	.28	.12				1.11	.16	.02	.01			1.22	.06	.01		.22	6.28
Edmonton	G																																
Eubank ‖	C					1.60				.05			2.60	.05	.47	.60	2.11	.50					.26	.20									8.44
Frankfort ‖	K					.20	.92			.68	.34		1.71		1.89	.68	.06	.35				.03	.35	T.	.05	.11		.75	.09		.78	.15	9.14
Franklin	G					.25	.35		.12	.18		.45	1.10	T.	2.34	.75	1.03					.76	.13	.51	T						.12	.90	8.99
Greensburg ‖	G					.26	.40		T.	.05		.42	.50		.91	1.32	.71	.04				.47	.06	.09	.32	.01	T.		.01		T.	.80	6.37
High Bridge ‖	K					.25	1.40			.03	.63	.55	1.45	.05	.50	1.30	.56	.67					.61	.08	.09	.04		.80	.05		.13	.07	9.15
Irvington	O					T				1.22		.36	.40		1.33	T.	.95					.39		.18		T.	1.17		.07		.05	1.25	7.37
Junction City	K					.13	.95		.04	.15		.37	.93	.04	.67	.76	.50	.10		.02		.53	.12	.12		.11	.11		.12		.20	.41	6.38
Lebanon	S																																
Leitchfield	G					.62				3.48		.80	.23		2.73	.19	.14					.43	.03	.10	T.		.26		T.		.22	1.44	10.67
Lexington ***	K				.11	.96	.01		T.	.63	.04	.78	.19	.03	2.13	.37	.27					.42	T.	.12		.12	.49		.03		.27	.98	7.95
LOUISVILLE***	O				T.	.03				1.07	.01	.40	.03	.13	1.06	.03	.82					.41		T.		T.	1.20		.03		.18	1.49	6.89
Do. (Cherokee Park)	O				T.	.11	.15			1.27	T.		.54		1.15	.05	.77					.54				.05	.83	.13	.06		.16	.14	5.95
St. John ‖	S					.11	1.40		T.	3.00	.04	1.22	.32		2.05	.35	.36	.01				.51	.03	.05			.92		.07		.18		10.62
Scott	L				T.	.08	1.99			.92	T.	.73	.61		.84	.67	2.05	.03				.15				.03	.45	.95	.10	T.	.13	1.40	11.13
Shelbyville ‖	S				.40	.33	.09			.94	.06	1.07	.45		1.85	.33	.76					.37		.01		.05	.91	.07	.04		.22	.40	8.95
Taylorsville	S					.32	.76		T.	1.37	.04	1.00	.54		2.29	.38	.23	T.				.50	T.	.04		.06	.96	T.	.06		.78	1.00	10.33
Williamstown ‖	L					.03	.10			.73		.24	.25		1.20	.09	.40	.05				.25	.03			.03	.75	.28	.10		.43	.84	5.80
Woodbury ‖	G						1.18			1.48	.36		.46	T.	1.61	1.37	.18	.04				.32	.49	.10	.17			.02			.12	T	7.91
Eastern Division.																																	
Beattyville ‖	K					.69	1.20			.10		.02	3.65	.03	.18	.63	1.35	.55					.16	.22	.05	.02	T.		T			T.	8.85
Berea	K			.25	.09	.67	.30		.02	.02		1.21	1.09		.61	.67	.93				.20	.08	.16						T.		T.	.32	6.62
Catlettsburg ‖	B					.18	.45			.05	.10		.95	.05	.40	1.24	.45	.10					.62	.02	.14		.16	.41				.08	5.40
Cynthiana ‖	L					T.	1.80			T.	.60	.15	1.60		1.60	1.00	.15	.30	T.	T			.25		T.	T.	T.	.85	T.	.60	T.	T.	8.90
Falmouth ‖	L					.12	.13			.40	.18	.20	.58		1.12	.21	.02	.39				.02	.40					.83	.04		.13	.11	4.88
Farmers	L					.53	.39				.21		.49	.40		1.10	.65	.81					.50	.40	.16			.43	.22				6.29
Harlan	K					.95						.33	2.80		.26	.91	1.20	.10				2.12				.62							8.69
Jackson ‖	K					.17	T	1.10			T.		2.30	T.	.32	.65	1.60	.50					.10	.11	.13	T.	.06			T.			7.04
London ‖	C					.25	1.50	.10	.19	.26			1.45	.50	.50	1.20	1.30	.30	.10				.50	.36	1.10	.10							9.71
Louisa ‖	B					.27	.55			.04	T.		.85	.07	.28	.55	.53	.45					.62	.49	.30	.05	.11	.75	.01			.01	5.93
Maysville ‖	O					.10	1.20		T.	T.	.35	T.	.98		1.00	.60	.06	.25					.36		T.	.07		.48	.21		.84	.11	6.61
Middlesboro	C			.97	.02	.06	.83		.13	.14		1.70	1.85	.25		.75	1.40	.08				.48	.22	.76	.32	.05							10.01
Mount Sterling ‖	L				.60	.42	.44		T.	.30	.45	.78	.34		1.70	.63	.70	T.				.96	.05	.08	.02	.08	.56	.03	T.		.12	.35	8.61
Pikeville ‖	B						.70						1.38	1.62	1.42	1.22	.84	.72					.38	.62	.44	T.							9.34
Richmond ‖	K				.12	.10	1.37		T.	.13		.48	.67		.73	.55	1.26	.01				.40	.05	.09			.03				.01	.10	6.10
Vanceburg	O					.05	1.48			.07	.43	.33	1.19		1.42	.70	.13	.50			.02	.01	.33		.02	.15		.83	.07		.33	.05	8.11
Weeksbury	B																																
Williamsburg ‖	C					.85	.50	.14		.43	T.		2.80	.10	.17	.36	1.58	1.54					.20	.55	.90	T.							10.12

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

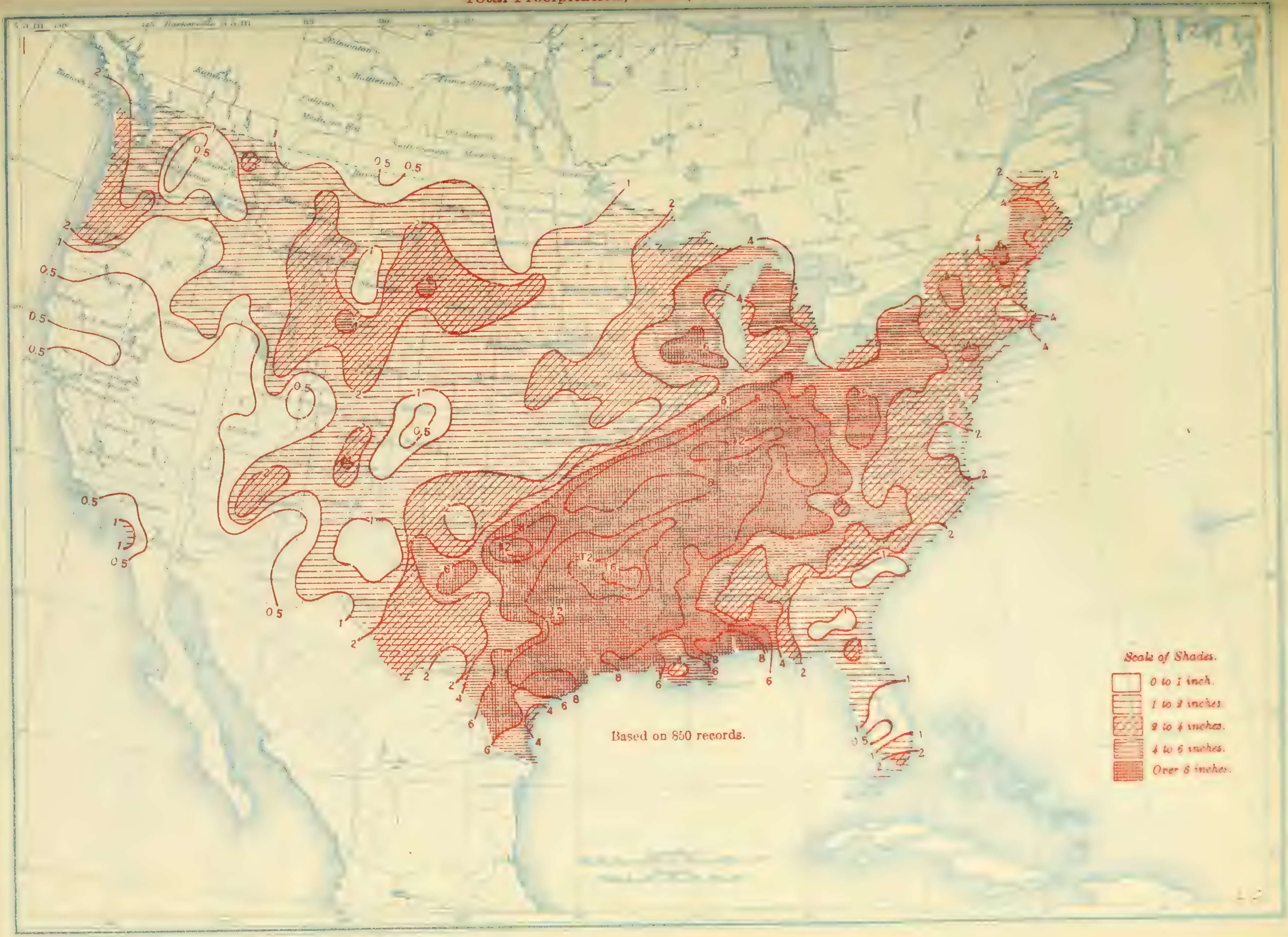
Daily temperatures for October, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	96	95	90	87	79	78	81	75	79	89	78	61	68	65	74	71	61	64	73	77	65	57	71	77	87	85	87	77	76	82	74	76.8
	Minimum	59	61	61	64	71	60	42	47	63	68	57	51	41	58	63	59	46	45	53	41	51	44	52	56	64	67	58	49	48	61	63	55.6
Blandville	Maximum	88	89	84	78	76	74	74	73	81	83	68	58	64	64	71	68	59	62	65	70	62	61	70	70	81	77	81	73	63	78	75	72.3
	Minimum	64	66	65	67	68	60	51	48	64	68	51	48	45	56	60	51	46	40	45	46	61	49	55	63	69	66	70	45	46	60	64	57.0
Calhoun	Maximum	96	95	92	83	78	80	80	74	76	87	79	68	69	64	70	71	72	69	74	77	72	57	73	76	84	78	87	77	71	80	73	76.8
	Minimum	61	62	59	66	67	58	47	50	63	69	55	49	43	56	61	60	47	40	41	42	50	44	51	56	64	63	65	47	45	58	63	54.9
Earlington	Maximum	98	97	94	81	77	81	82	77	75	81	74	57	71	65	73	69	62	71	75	80	65	58	73	81	85	81	88	77	75	82	75	77.0
	Minimum	62	64	64	67	69	61	47	50	64	64	55	51	42	52	63	51	49	36	39	49	52	45	54	62	67	67	71	49	47	58	65	56.1
Greenville	Maximum	94	92	91	83	78	78	79	77	81	88	79	60	66	64	72	70	60	68	72	76	68	57	71	78	85	84	85	79	76	80	74	76.3
	Minimum	60	60	62	63	69	61	45	49	64	69	55	50	41	56	62	54	47	39	40	41	50	45	54	59	65	69	69	48	46	61	64	55.5
Hopkinsville	Maximum	95	93	94	90	83	80	80	77	83	88	78	61	67	65	74	71	65	72	76	77	66	60	68	77	85	85	85	76	77	79	76	77.6
	Minimum	69	69	72	71	68	61	70	54	65	68	58	51	46	58	65	55	49	39	46	43	52	48	50	60	65	69	75	50	49	64	52	58.4
Marion	Maximum	92	91	88	80	75	75	77	74	76	83	76	60	66	61	70	69	54	66	69	73	66	64	72	75	81	75	82	76	74	79	73	74.0
	Minimum	67	68	67	67	68	58	53	56	63	70	60	49	44	56	63	50	47	38	45	46	48	46	52	60	68	64	69	46	45	59	66	56.7
Mayfield §§	Maximum	91	90	88	89	76	71	76	73	81	81	74	51	64	64	71	69	60	65	71	73	63	63	69	74	81	80	82	52	73	80	77	73.3
	Minimum	61	62	63	64	68	61	51	51	57	65	54	49	46	47	59	58	48	37	41	43	49	48	50	60	63	71	68	47	47	49	67	55.0
Owensboro	Maximum	92	91	89	82	76	72	78	76	76	85	72	60	65	64	70	69	60	65	70	73	62	56	71	76	83	73	84	53	67	81	76	73.1
	Minimum	61	63	62	67	67	59	48	52	64	69	53	50	45	54	56	57	45	42	41	45	48	46	53	56	66	65	53	48	46	45	66	54.6
Paducah (Lone Oak)	Maximum	91	92	94	92	82	76	78	76	81	89	78	67	66	65	70	76	67	66	70	71	66	74	71	77	84	81	85	79	70	79	75	77.0
	Minimum	55	58	60	62	70	60	52	50	56	52	52	46	48	57	62	52	46	39	43	46	44	45	55	57	68	66	70	66	58	58	64	55.4
Princeton §§	Maximum	91	92	..	..	89	..	77	75	75	85	69	55	66	65	73	68	60	65	69	73	60	59	71	76	..	..	..	..	..	..	..	j72.0
	Minimum	60	61	58	..	..	61	..	55	65	70	58	50	46	59	63	57	48	42	46	41	59	47	58	61	69	..	..	..	..	..	..	i56.1
Russellville §§	Maximum	85	88	87	83	76	74	77	70	81	86	71	71	64	66	72	77	59	65	72	76	60	61	65	75	82	84	79	57	77	78	70	73.8
	Minimum	59	61	64	61	65	63	50	49	55	68	60	52	45	45	61	65	47	39	40	45	45	49	50	60	61	67	66	47	50	51	66	55.1
Central Division.																																	
Alpha	Maximum	85	84	84	76	80	77	71	78	78	79	76	68	68	70	71	73	66	64	67	70	65	62	68	72	79	82	78	74	70	76	78	73.8
	Minimum	58	60	70	60	70	60	50	66	68	71	62	65	54	65	67	64	52	46	50	52	51	54	65	62	68	72	71	51	54	68	70	61.3
Anchorage	Maximum	92	93	91	86	81	78	79	73	77	86	70	55	63	61	72	69	61	63	72	75	63	54	68	77	84	74	83	74	65	80	72	74.0
	Minimum	58	60	60	62	66	54	43	56	62	68	53	43	39	53	61	53	43	28	36	46	47	39	49	51	58	64	64	42	42	52	61	52.4
Bardstown	Maximum	93	94	95	93	81	77	78	73	75	87	72	61	66	66	72	72	65	67	71	76	65	56	68	78	85	76	84	72	71	77	76	75.5
	Minimum	62	62	65	66	65	58	47	49	62	67	60	45	44	50	57	65	49	41	39	45	54	45	50	59	60	65	63	51	48	60	63	55.4
Bowling Green	Maximum	92	93	90	87	81	80	80	71	84	87	86	70	68	66	75	77	73	70	71	77	68	60	68	75	83	85	87	77	77	79	74	77.9
	Minimum	62	62	68	64	67	63	51	53	65	70	63	53	50	46	65	66	58	40	42	48	51	49	51	62	62	65	66	51	52	64	62	57.9
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	89	88	86	83	80	75	73	63	76	82	80	68	62	66	70	72	66	65	..	71	65	62	68	74	81	83	82	83	79	76	73	74.7
	Minimum	59	58	66	61	66	65	45	47	58	67	63	52	45	48	62	60	48	42	..	47	58	48	58	60	58	66	63	52	52	64	66	56.8
Frankfort	Maximum	89	90	89	86	82	74	75	72	77	83	81	62	64	66	72	72	70	65	67	71	70	57	68	73	82	80	82	78	66	77	75	74.7
	Minimum	62	61	63	65	68	65	49	51	63	69	60	51	43	57	64	66	50	41	40	47	55	45	52	55	52	67	64	52	47	56	64	56.3
Franklin	Maximum	90	94	93	88	79	76	74	70	83	87	80	72	60	67	74	76	64	72	74	77	67	59	66	77	85	86	86	76	79	81	78	77.1
	Minimum	63	68	69	65	68	60	50	53	66	70	68	53	47	58	65	64	48	52	58	40	57	51	57	59	65	70	69	51	51	67	65	59.6
Greensburg	Maximum	90	91	90	89	85	75	73	68	79	85	85	78	62	67	74	71	68	65	70	74	70	62	68	74	83	84	83	79	75	78	70	76.4
	Minimum	57	57	61	62	66	68	46	46	62	68	66	51	45	57	63	65	48	37	40	44	54	45	53	60	59	67	62	51	51	61	62	55.9
Irvington	Maximum	90	90	88	86	81	74	76	75	77	84	75	56	64	64	70	69	60	65	67	72	66	57	69	75	82	77	83	75	67	79	77	73.8
	Minimum	64	64	66	69	69	61	47	51	64	70	56	51	49	54	62	60	45	41	43	47	57	43	48	56	65	65	65	50	47	57	65	56.5
Junction City	Maximum	91	90	90	86	83	80	76	72	76	82	80	71	65	68	71	76	67	67	71	73	67	72	68	74	84	83	83	77	79	78	73	76.5
	Minimum	58	58	59	62	62	50	45	45	61	66	58	51	42	57	63	66	48	37	41	41	54	43	53	60	57	67	62	57	50	58	63	54.6
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	90	90	88	89	80	74	71	71	78	85	80	63	65	64	72	70	62	64	71	71	67	55	68	74	83	78	82	72	72	77	73	74.4
	Minimum	61	63	64	66	67	66	48	52	62	69	61	51	44	57	63	60	46	41	48	47	50	45	53	60	62	66	66	49	49	61	63	56.8
Lexington	Maximum	89	89	88	83	79	73	73	68	75	80	69	53	61	65	68	70	54	63	66	71	62	58	63	73	80	75	81	71	71	74	72	71.5
	Minimum	70	68	69	68	67	59	54	[illegible]	61	67	51	48	43	56	63	49	47	42	49	50	49	46	54	59	61	67	67	47	46	69	61	56.5
Louisville	Maximum	91	91	89	85	79	73	77	72	75	85	70	56	63	64	71	69	60	66	70	73	62	57	66	75	81	73	82	72	63	77	71	72.8
	Minimum	68	69	69	70	69	60	52	56	64	70	51	49	46	57	62	50	46	43	46	50	50	46	54	55	63	62	63	45	44	58	64	66.5
Do. (Cherokee Park)	Maximum	86	88	86	83	79	74	73	72	75	83	75	58	62	64	70	70	65	64	66	70	68	55	66	73	80	76	80	77	62	77	72	72.5
	Minimum	63	64	64	68	69	62	49	51	64	71	57	50	43	56	62	65	45	40	42	46	52	42	50	53	62	66	63	49	45	53	65	55.8
St John	Maximum	92	93	92	89	86	77	77	69	77	85	76	60	63	64	71	70	66	65	69	72	65	55	67	76	84	71	83	76	72	78	74	74.7
	Minimum	[illegible]	60	61	64	66	61	47	51	63	69	59	51	43	58	63	65	46	40	41	45	51	45	53	57	61	65	64	50	48	70	65	56.2
Scott	Maximum	90	92	90	85	79	75	79	75	76	83	70	58	60	63	68	69	70	63	68	69	63	57	68	71	79	75	69	71	56	76	72	72.2
	Minimum	63	65	65	68	67	61	48	52	60	69	50	48	41	55	59	60	45	39	38	44	52	39	47	59	59	65	62	48	38	52	62	54.2
Shelbyville	Maximum	88	87	85	84	80	77	80	72	77	85	77	59	63	65	70	70	65	67	72	77	69	54	67	76	83	76	83	80	67	79	74	74.5
	Minimum	60	59	61	61	64	59	43	47	60	66	55	47	37	53	60	62	46	36	38	42	50	39	49	50	56	65	62	47	41	53	60	52.6
Taylorsville	Maximum	88	89	89	86	81	73	75	71	75	82	77	58	63	65	71	70	65	63	68	70	65	56	66	73	82	77	82	77	67	77	74	73.4
	Minimum	58	57	60	60	62	62	45	47	63	68	57	51	40	57	62	61	48	37	36	43	52	44	52	54	56	66	63	50	46	56	62	54.1
Williamstown	Maximum	95	94	94	88	78	78	84	76	78	83	76	63	64	69	78	73	68	68	75	75	66	55	68	77	81	78	80	72	65	75	71	75.6
	Minimum	68	68	68	68	67	61	49	62	67	..	61	57	52	63	68	64	56	58	51	56	54	42	53	56	58	65	63	44	41	53	61	a58.8
Eastern Division.																																	
Beattyville	Maximum	92	95	94	88	87	79	62	63	79	86	84	67	64	68	71	78	69	68	71	76	70	66	70	78	85	87	88	79	84	73	76	77.3
	Minimum	60	56	61	61	66	61	49	47	56	58	59	52	45	57	63	64	50	40	43	46	49	49	55	61	53	61	60	55	51	55	59	54.9
Berea	Maximum	87	92	94	83	85	73	76	65	75	81	82	67	57	66	70	70	66	72	75	67	65	68	71	82	83	..	84	75	70	77	77	a75.2
	Minimum	60	64	70	63	67	65	46	46	54	64	65	52	43	54	64	66	46	42	45	55	45	45	60	60	68	..	65	52	50	60	62	a56.6
Farmers	Maximum	94	94	93	89	78	78	79	72	81	86	76	65	60	65	[illegible]	76	67	69	74	75	72	65	66	75	82	82	81	78	78	72	75	76.4
	Minimum	55	55	52	59	65	66	43	42	42	63	60	50	40	55	61	63	49	35	35	42	50	43	52	57	50	64	63	53	47	53	61	52.5
Harlan	Maximum	..	..	..	..	..	..	..	..	..	82	83	70	71	78	72	80	67	73	..	..	..	..	..	69	77	83	83	77	81	83	75	n76.7
	Minimum	..	..	..	..	..	..	..	..	..	58	61	58	53	60	62	62	54	52	..	..	..	..	..	55	57	61	64	60	57	60	61	n58.5
Maysville	Maximum	95	95	94	88	84	78	81	73	79	86	78	62	64	66	70	77	68	68	72	73	65	60	67	73	82	75	81	72	64	71	73	75.3
	Minimum	64	63	66	66	69	68	50	52	60	70	65	50	42	58	64	66	51	41	43	46	56	45	50	57	57	67	65	56	45	54	63	57.1
Middlesboro	Maximum	90	92	87	86	82	80	76	70	79	85	86	68	63	73	80	82	68	70	74	70	67	69	70	74	78	83	84	87	82	83	80	78.0
	Minimum	50	53	60	63	65	67	55	42	55	57	57	57	53	53	60	61	52	50	47	50	51	59	62	61	55	63	62	59	55	58	63	56.6
Mount Sterling	Maximum	90	92	[illegible]	85	84	84	74	70	79	84	75	66	60	66	68	75	66	75	78	80	65	64	65	83	87	78	81	75	70	72	74	76.0
	Minimum	60	60	65	65	65	63	46	50	58	66	64	50	56	56	63	65	49	38	42	50	50	50	45	54	53	53	69	63	56	49	56	55.8
Richmond	Maximum	93	92	91	86	83	85	78	72	76	83	78	56	64	67	71	72	68	70	71	75	68	64	66	72	83	79	84	77	78	74	74	75.8
	Minimum	[illegible]	68	68	68	69	67	51	51	60	68	56	53	44	58	64	65	56	40	46	49	59	46	54	61	60	69	67	53	51	60	68	58.3
[illegible]	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	92	91	91	89	87	89	79	76	78	86	86	74	65	72	69	73	58	58	64	72	75	70	68	75	81	85	82	80	82	80	..	a77.6
	Minimum	56	54	61	58	60	61	51	45	60	61	58	57	48	55	52	58	49	48	51	52	51	53	51	62	54	63	60	60	55	65	63	55.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a b c etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, October,



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CLIMATOLOGICAL DATA

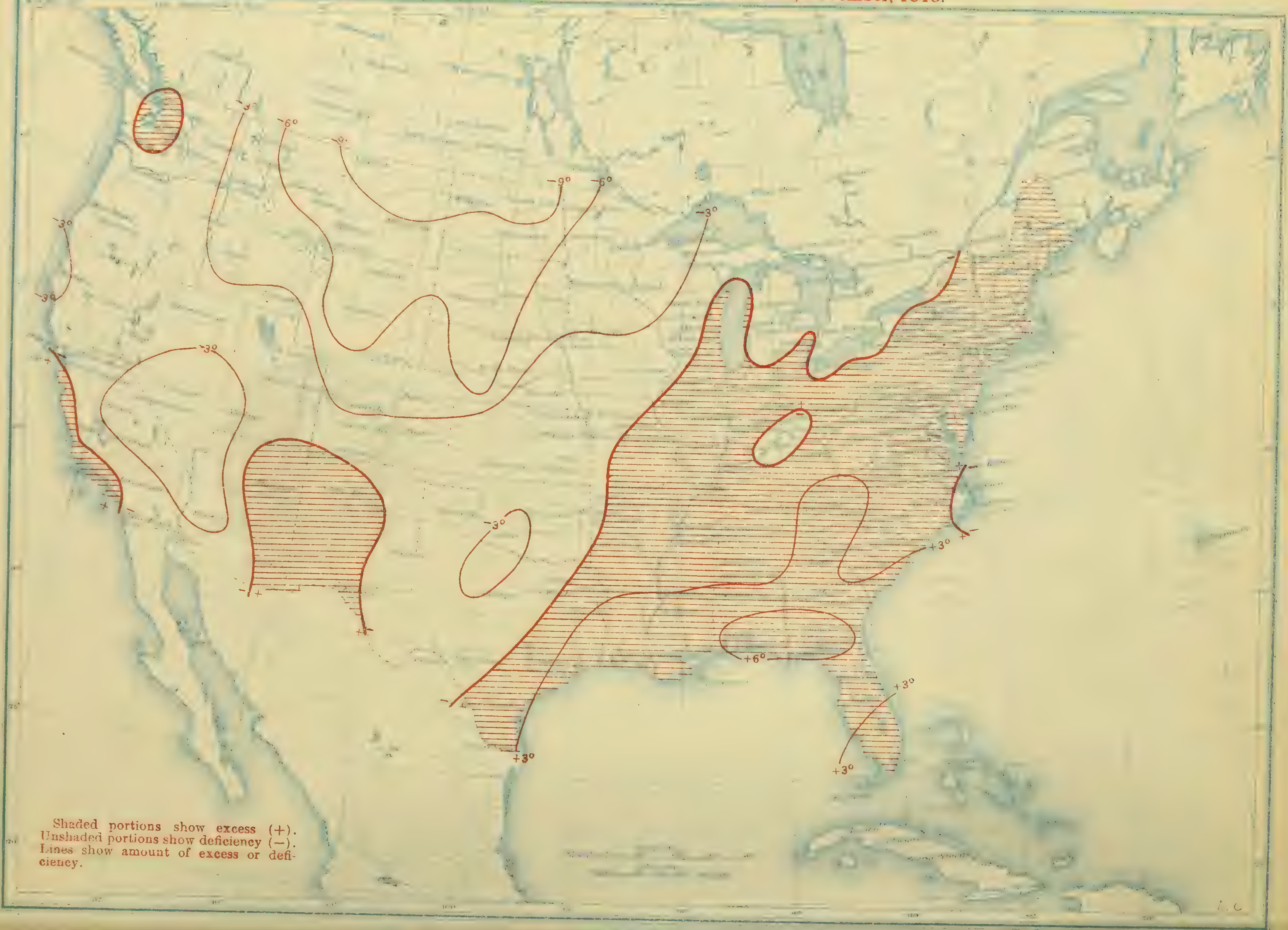
KENTUCKY SECTION

NOVEMBER, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 26, 1919.

Departure of the Mean Temperature from the Normal, November, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXIV. LOUISVILLE, KY., NOVEMBER, 1919 No. 11

GENERAL SUMMARY.

Warm growing weather prevailed during the first four days, terminating on the 5th with freezing temperatures and the first killing frost of the season, a remarkably late date for most sections of the State. Wet weather continued through the first decade, preventing late seeding and damaging corn in the field. About 10 days of fair weather occurred near the middle of the month, and for a few days near the end of this period the soil could be worked. Considerable wheat was sown at this time, but much of it had not germinated at the end of the month. Potatoes were dug and good progress was being made with gathering corn, when the rains again set in—the month ending as it began, with excessive rains which stopped all outdoor work. Lowlands were flooded and crops washed away throughout the farming districts.

The period of wet weather, which began October 9th and ended near the middle of November, included most of the time when wheat is sown in this State; and resulted in a great curtailment of the wheat crop, probably the most serious feature of the wet spell. Never during the 31 years of State records have such conditions prevailed through the period of fall seeding and harvest. The continuous wet weather caused extensive damage to corn in shock by sprouting and molding; and also caused the standing corn to fall and damage on the ground.

PRESSURE.

Strong high pressure areas, moving across the interior of the country, dominated weather conditions from the 12th to 22d and caused the period of fair weather. The most important low pressure areas affecting weather conditions over this State were as follows: a shallow center drifted eastward over Tennessee on the 1st, attended by heavy rains; 6-7th, a shallow center moved eastward over this State with moderate rains; 9-10th, a storm of steep gradient moved nearly north from Texas to the upper Mississippi Valley attended by moderate rains over this State; 25-26th, a northeast-southwest trough of which the northern center moved eastward across the Ohio Valley attended by very heavy rains: and on the 28th, a storm of intense gradient that moved rapidly northward over the Central Valleys to the Lake region, attended by heavy rains and destructive gales.

The mean sea-level pressure, based on the records of two stations, was 30.14 inches. The extremes were 30.61 inches at Lexington on the 20th, and 29.32 inches at Louisville on the 29th.

TEMPERATURE.

The average temperature for the State, 39 stations reporting, was 47.4°, which is 1.3° above normal. Moderately warm weather prevailed during the period 1st-4th, 6-12th, and on many days during the last half of the month. Low minimum temperatures during the period 13th-21st, ranging generally from 16° to 32°, retarded the germination of late sown grain. The extremes were 78° at Beattyville and Marion on the 9th, and 16° at Anchorage and Junction City on the 14th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 54 stations, averaged 7.31 inches, which is 3.96 inches in excess of normal and exceeded only in the past records for this month by the average for November, 1900, which was 7.78 inches. Heavy rains occurred in the period 1st-2d, and moderate to heavy rains in the period 6-11th. Heavy rains were again general from the 25th to 28th. Rainfalls of 1.00 inch or more in 24 hours occurred at numerous stations on the 1st, 2d, 25th, 26th, and 28th, ranging between 1.00 and 4.00 inches on the 1st and 26th. The heaviest rains occurred over a broad belt extending from the lower Tennessee and Cumberland northeastward across the center of the State to the upper Licking Valley, amounts ranging from eight to more than 10 inches. From this belt the rainfall decreased to about six inches near the Ohio River and to about four inches in the southeastern mountain section. Amounts at the various stations ranged between 3.25 inches at Alpha and 10.63 inches at Brownsville.

WIND.

The total wind movement at Louisville was 8,729 miles, and at Lexington 9,494 miles, with average hourly velocities of 12.1 and 13.2 miles, respectively. The maximum velocity for five minutes was at the rate of 58 miles per hour on the 29th at Louisville, and 62 miles on the 30th at Lexington, from the southwest at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 83 per cent, at 12 noon 66 per cent, and at 7 p. m. 73 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 59 and at Lexington 50.

MISCELLANEOUS

Nov. 1-3.—Much damage was caused in many sections of the State, especially in Bourbon, Christian, and Montgomery counties by floods in creeks and small streams. Much corn was washed away, bridges were washed out, and bottom land was badly injured by erosion.

Nov. 7.—Heavy loss was occasioned by overflowing of lowlands along the lower Green and lower Ohio rivers. Losses of corn in the Henderson section were estimated at 80,000 bushels.

Nov. 29.—A heavy windstorm caused much damage to build-

(Continued on next page.)

COMPARATIVE DATA FOR NOVEMBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30 year normal.	Highest.	Lowest.	Monthly average.	Departure from 30 year normal.	No. of days with .01 or more.
1889	43.1	−3.0	[illegible]	[illegible]	6.04	+2.69	
1890	48.6	+2.5	81	19	4.87	+1.52	
1891	43.5	−2.6	77	[illegible]	6.04	+2.69	[illegible]
1892	42.8	−3.3	78	9	3.85	+0.50	
1893	44.3	−1.8	79	−2	3.12	−0.23	
1894	43.3	−2.8	80	8	1.32	−2.03	[illegible]
1895	45.8	−0.3	85	16	4.29	+0.94	[illegible]
1896	49.3	+3.2	80	11	5.01	+1.66	[illegible]
1897	47.8	+1.7	78	12	4.69	+1.34	[illegible]
1898	43.2	−2.9	80	10	2.79	−0.56	[illegible]
1899	49.8	+3.7	79	20	2.12	−1.23	[illegible]
1900	47.0	+0.9	83	15	7.78	+4.43	[illegible]
1901	41.8	−4.3	82	11	1.52	−1.83	[illegible]
1902	53.4	+7.3	90	20	4.42	+1.07	[illegible]
1903	42.5	−3.6	81	5	3.01	−0.34	[illegible]
1904	44.7	−1.4	79	14	0.89	−2.46	[illegible]
1905	46.4	+0.3	79	14	3.55	+0.20	[illegible]
1906	46.1	0.0	[illegible]	11	5.02	+1.67	[illegible]
1907	44.2	−1.9	75	15	3.49	+0.14	[illegible]
1908	48.6	+2.5	80	8	2.61	−0.74	[illegible]
1909	54.7	+8.6	86	19	2.29	−1.06	[illegible]
1910	41.1	−5.0	78	11	2.04	−1.31	[illegible]
1911	41.6	−4.5	85	9	4.51	+1.16	[illegible]
1912	45.2	−0.9	82	10	1.22	−2.13	[illegible]
1913	50.5	+4.4	81	8	3.25	−0.10	[illegible]
1914	46.9	+0.8	83	5	1.23	−2.12	[illegible]
1915	49.8	+3.7	85	[illegible]	4.80	+1.45	[illegible]
1916	47.8	+1.7	83	8	[illegible]	−1.53	[illegible]
1917	44.3	−1.8	78	11	1.23	−2.12	[illegible]
1918	46.1	0.0	77	19	[illegible]	−1.45	[illegible]
1919	47.4	+1.3	78	16	7.31	+3.96	[illegible]

Climatological data for November, 1919.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	47.6	+ 1.3	74	9	18	14	36	8.05	+5.19	3.90	0	7	20	6	4	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	46.8	+ 0.2	66	9†	22	13	31	7.44	+3.37	2.65	T.	10	16	1	13	ne.	E. W. Horr.
Calhoun	McLean	437	15	47.4	− 1.0	70	9	19	14	36	7.60	+4.49	1.85	0	8	12	9	9	nw.	W. A. Taylor.
Earlington	Hopkins	420	28	48.0	+ 0.1	71	9†	19	14	38	10.39	+6.65	3.25	0	10	19	0	11	n.	Brick Southworth.
Greenville	Muhlenburg	519	2	^{d}47.7	...	70	9†	18	14	36	10.21	...	3.80	0	...	18^{d}	4^{d}	4^{d}	n.	C. R. Lovell.
Henderson	Henderson	327	11	...	...	...	...	...	...	...	5.91	+2.17	1.95	0	9	...	...	...	...	W. W. Shelby.
Hopkinsville	Christian	524	22	49.2	+ 0.9	72	1	19	14	40	9.03	+4.88	2.88	0	9	6	9	15	se.	W. E. Graves.
Marion	Crittenden	571	20	48.0	− 0.3	78	9	22	13†	30	7.64	−3.92	1.70	0	6	17	1	12	nw.	B. C. Paris.
Mayfield	Graves	364	9	47.5	− 1.5	67	23	21	14	38	7.91	+3.71	2.28	0	7	12	8	10	n.	J. N. Davis.
Owensboro	Daviess	479	22	47.2	− 0.3	74	1	22	14	30	6.14	+2.69	1.30	0	7	16	4	10	se.	Henry S. Berry.
Paducah (near)	McCracken	341	19	48.0	− 0.9	77	1	22	14	43	6.72	...	1.90	0	12	16	1	13	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	^{g}45.7	− 0.8	67^{g}	10	19^{g}	14	36	9.15	+5.03	3.00	0	...	13^{h}	0^{h}	9^{h}	...	Ray Baker.
Russellville	Logan	590	6	^{b}47.0	...	68^{d}	9	18	14	39^{1}	7.98	...	2.50	0	8	18	2	10	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	49.6	+ 0.1	69	1†	21	14	32	3.25	−0.38	...	0	5	12^{a}	6^{a}	11^{a}	w.	Taylor Davis.
Anchorage	Jefferson	700	18	44.7	+ 0.2	72	9	16	14	36	6.05	+3.08	1.96	0	9	18	4	8	nw.	C. E. Barret.
Bardstown	Nelson	637	22	47.4	+ 0.4	73	9	19	14	31	8.14	+4.76	2.60	0	9	21	8	1	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	48.6	+ 1.3	74	2	20	14	37	7.17	+3.56	2.07	0	8	16	3	11	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	...	...	...	...	...	...	...	10.63	...	4.00	0	10	...	...	...	...	James H. Young.
Burnside	Pulaski	773	26	...	...	...	...	...	...	...	7.75	+4.54	1.76	0	8	...	...	...	...	F. E. Bradshaw.
Carrollton (Lock No.)	Carroll	492	20	...	...	...	...	...	...	...	6.74	+3.81	2.68	0	8	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	5	...	...	...	...	...	...	...	7.07	...	1.95	0	10	...	...	...	...	W. A. Cockerill.
Edmonton	Metcalfe	600	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Eubank	Pulaski	1177	24	47.0	+ 2.5	71	1	17	14	41	7.93	+4.90	3.06	0	6	10	9	11	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	47.0	+ 0.8	70	9	22	14	31	7.27	+3.86	2.90	0	11	16	5	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	49.4	+ 0.9	69	1†	19	14	34	6.01	+2.48	1.71	0	6	17	4	9	n.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	47.2	+ 2.5	71	9	17	14	39	7.23	+3.82	2.43	0	12	13	2	15	ne.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	...	...	...	...	...	...	...	9.10	+6.39	4.06	0	9	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	21	46.1	− 0.6	70	9	21	14	28	6.44	+3.23	1.77	0	7	19	2	9	sw.	W. J. Piggott.
Junction City	Boyle	985	25	48.2	+ 5.6	71	9†	16	14	41	7.26	+4.12	3.00	0	13	12	8	10	s.	Prof. E. L. Grubbs.
Lebanon	Marion	754	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leitchfield	Grayson	635	23	46.8	+ 0.5	70	9	19	14	32	9.58	+5.65	3.72	0	7	15	5	10	sw.	John E. Stone.
Lexington	Fayette	989	31	44.9	+ 0.2	69	9	21	13	29	8.50	+5.02	3.95	0	12	13	5	12	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	46.0	− 0.3	70	9	22	13	31	5.59	+1.41	1.91	0	8	16	3	11	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	9	46.4	− 0.2	70	9	22	13†	31	6.63	+4.20	2.28	0	9	17	4	9	s.	Wm. I. Hunt.
St. John	Hardin	777	22	47.7	+ 2.4	70	9	19	15†	36	8.21	+4.73	2.90	0	8	16	5	9	...	Sisters of Loretto.
Scott¶	Kenton	900	21	44.0	− 1.0	67	9	20	13†	28	5.15	+2.35	1.49	0	10	10	10	10	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	45.4	+ 1.0	73	9†	17	14	36	8.83	+5.42	2.65	0	11	14	5	11	s.	F. A. Miller.
Taylorsville	Spencer	489	16	45.4	+ 0.5	70	9	19	14	33	8.04	+4.94	2.86	0	10	15	3	12	s.	E. D. Bourne.
Williamstown	Grant	943	16	45.8	+ 0.7	72	9	20	13	30	6.29	+3.95	2.15	0	9	8	12	10	...	Miss Rose Carter.
Woodbury	Butler	533	1	...	...	...	...	...	...	...	8.21	...	2.60	0	10	...	...	...	...	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	^{a}48.2	+ 4.1	78	9	18	20	47	7.63	+4.88	2.11	0	8	9	6	15	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	48.4	+ 1.2	75	0	18	14	35	6.38	+3.48	2.57	0	6	15	5	10	n.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	...	...	...	...	...	...	...	6.87	+4.05	1.80	0	11	...	...	...	...	Forester Farley.
Cynthiana	Harrison	684	1	...	...	...	...	...	...	...	8.00	...	3.00	0	9	...	...	...	...	P. H. Keboe.
Falmouth	Pendleton	600	30	...	...	...	...	...	...	...	6.87	+3.70	2.86	0	10	12	6	12	s.	J. V. Oldham.
Farmers	Rowan	668	11	46.8	+ 1.8	75	1	20	14†	42	9.30	+6.57	4.10	0	7	17	6	7	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	^{h}52.6	...	72^{h}	1†	22^{h}	14	41^{h}	5.05	...	1.79	0	11	8^{h}	2^{h}	12^{h}	...	Will Ward Duffield.
Jackson	Breathitt	776	7	...	...	...	...	...	...	...	6.90	+3.22	2.00	0	6	...	...	...	...	Jas. L. McCoy.
London	Laurel	1190	4	...	...	...	...	...	...	...	6.63	...	1.70	0	9	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	15	...	...	...	...	...	...	...	6.03	+3.28	1.68	0	9	...	...	...	...	Miss Carrie S. Adams.
Maysville	Mason	524	21	47.6	+ 3.0	70	9	22	14	34	8.11	+5.27	2.80	0	11	7	16	7	nw.	Harry M. Robinson.
Middlesboro	Bell	1128	21	48.8	+ 3.0	74	1	19	14†	41	4.07	+0.56	1.13	0	10	17	7	6	...	B. H. Perkins.
Mount Sterling	Montgomery	930	29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	W. R. McKee.
Pikeville	Pike	634	13	...	...	...	...	...	...	...	4.34	+1.47	1.22	0	9	...	...	...	...	I. M. Williams.
Richmond	Madison	926	24	49.2	+ 2.4	75	9	22	14	33	7.53	+4.66	3.20	0	7	17	2	11	...	J. W. Crooke.
Vanceburg	Lewis	525	...	...	...	...	...	...	...	...	7.25	...	2.21	0	12	...	...	...	...	Samuel Johnson.
Weeksbury	Floyd	1216	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	P. V. Johnson.
Williamsburg	Whitley	939	21	^{b}50.6	+ 3.5	71	10	20	14	39	6.64	+3.71	2.55	0	8	12	10	8	s.	N. C. Jones.
State averages and extremes		...	...	47.4	...	78	9	16	14	47	7.31	...	4.06	T.	9	15	5	10	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky.

ings, and to telephone and telegraph lines throughout the State. Lowlands along headwater streams were inundated with heavy loss of corn and fodder.

Rivers.—The Ohio River and other streams of the State were rising rapidly on the first, the rise in the upper Ohio continuing until the 5th and in the lower river until the 9th. Flood stage was reached at Evansville on the 5th, and a stage of 38.0 feet on the 8th. Flood stage was not reached at any other point. The river subsided slowly, returning to normal conditions by by the 20th. Another rise set in on the 26th and continued until the end of the month, when stages were near flood heights in the Cincinnati-Evansville stretch.

Daily Precipitation for November, 1919.

Stations.	Day of month.																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam‖ G	3.90	.17				.43				.10												.20			2.00				.95			[illegible]
Blandville M	1.56					.88		.01		[illegible]											.03				[illegible]	1.65		.19	[illegible]			[illegible]
Calhoun G	1.45	.03				T	.54	T		.58												[illegible]	T		1.45	1.55	T		1.32			[illegible]
Earlington‖ G	3.25	.28					.80			.52	.25											.02				2.40	.15		.62	2.10		10.39
Greenville G	3.50	.07					[illegible]			.74															1.20				*	[illegible]		10.21
Henderson‖ O	1.95						.51			.66	.13														.07	1.75	.15			.60		5.91
Hopkinsville‖ C	2.88					T.	.76			.85	.05											T			1.03	1.95	.01		1.49	.01		[illegible]
Marion O	1.40						.86			.88											T				1.45	1.70			1.35			[illegible]
Mayfield M	2.00	.18					.85			1.01	.14															2.28			1.45			7.91
Owensboro‖ O	1.28					T	.60			.20	.18										T	T.			1.28	1.30	T		1.30			6.14
Paducah (near) O	.11		.06			.55	.26	.02	.08	1.02												.02			.78	1.90	.02		1.80			6.72
Princeton‖ G	*	3.00					1.17				.96											.01	3.00		1.01							9.15
Russellville‖ G	2.50	.60					.60			.52	.26															2.00	.90			.60		7.98
Central Division.																																
Alpha C	.40										.25														*	2.00		.10	.50			3.25
Anchorage O	1.96					.25	.10			.38	.11											.10		T.	1.26	1.33			.56			6.05
Bardstown S	2.10	.23					.37			.44	.25											.20			1.50	2.60			.45			8.14
Bowling Green G	[illegible]						.10			[illegible]	[illegible]											.85			1.00	2.07			.80			7.17
Brownsville G	[illegible]	1.11					.83			.13	.58											.11				2.85	.17		.23	.59		10.53
Burnside C	1.72	1.76					.10			T.	.68											T.				1.75	1.00		.20	.54		7.75
Carrollton‡ (Lock No. 1) O	2.68						.30		.02		.40															1.90	.54		.38	.52		6.74
Cloverport‡ O	1.95	.62					.50	.05		.28	.70														T.	1.82	.13	T.	.60	.42		7.07
Edmonton G																																......
Eubank C	2.05	1.02								.65																3.06	.53			.62		7.93
Frankfort‡‖ K	1.50	1.33					.15			.02	.48											.06		T.	.03	2.90	.36		.08	.36		7.27
Franklin G	1.56						.45			.43															1.01	1.71	T	T	.85			6.01
Greensburg G	2.43	.09					.32	.01		.46	.11											.09			1.00	2.24	.04	.01	.43			7.23
High Bridge K	2.20	1.45					.14			T.	.39											.09				4.06	.43		.02	.32		9.10
Irvington O	1.77					T.	.53	T.		.53													.18		1.23	.98	T.	T	1.22			6.44
Junction City K	.98	.35	.01		.01		.20			.25	.14											.14			.95	3.00	.40	.43	.40			7.26
Lebanon S																																....
Leitchfield G	3.72					.45				.58												.16			3.00	.80			.87			9.58
Lexington *** K	3.34					.10	.01	T.		.40											.06	.03	.01		2.03	2.15	.01	.01	.35			8.50
Louisville *** O	1.62					.29				.42											.05	.01	T.		1.51	.78	T.	T.	.91			5.59
Do. (Cherokee Park) O	2.28	.41					.33			.42	.09											.08			1.28	1.01			.73			6.63
St. John S	2.90	.11					.52			.48												.21			1.50	1.85			.61			8.21
Scott L	.46	.51				T.	.34			.35	.23											.07	.27		.76	1.49			.67			5.15
Shelbyville‖ S	2.65	.35				.06	.26			.36	.24											.13	T		1.66	2.70	.02	T.	.40			8.83
Taylorsville S	2.86	.36				T.	.26	T.		.35	.17											.06	T.		1.17	2.21	T.	.01	.59			8.04
Williamstown L	1.30	.30					.25			.40	.15												.05		1.15	2.15			.54			6.29
Woodbury‡‖ G	2.27	.92					.80			.13	.49											.11			T.	2.60	.11		.15	.63		8.21
Eastern Division.																																
Beattyville‡‖ K	1.81	2.11					T.				.72		T.									.20		T.		1.45	1.07		.07	.20		7.63
Berea K	2.57	.15					T.			.26												T.			1.40	1.57		T.	.43			6.38
Catlettsburg‖ B	1.38	1.28					.16	.02			.67											.20		.16	.06	1.80	1.10		.04			6.87
Cynthiana‖ L	1.85	1.20				T.	.05		T.		.60											.10		T.		3.00	.60	T	.05	.55		8.00
Falmouth‖ L	1.23	.85					.35				.42											.03		.16		2.86	.55		.12	.30		6.87
Farmers L	4.10	.35									.20	.45													.40	3.10				.70		9.30
Harlan K	1.79	.46								.01	.43	.27										.08			.23	1.10	.01	.02	.65			5.05
Jackson‖ K	1.85	2.00					T.	T.			.72	T.										T.		T		1.20	.80		T.	.33		6.90
London‖ C	1.70	.95									.85											.05				.95	1.55	.20	.28	.10		6.63
Louisa B	1.54	1.11					.07	T.			.42											.25		T.		1.68	.68	T.	.02	.26		6.03
Maysville‡ O	1.37	.85					.38	T.			.49											.12		.12	.06	2.80	1.46		.10	.36		8.11
Middlesboro C	.72	.31					.05				.72	.33										.04			.14	1.13		.06	.57			4.07
Mount Sterling‖ L																																....
Pikeville‖ B	1.22	1.08					.12				.18	.52	T.									.12				.32	.42			.36		4.34
Richmond‖ K	3.10	.21					.07			.25															.20	3.20			.50			7.53
Vanceburg O	2.21	.73	.01				.27				.50											.15		.16	.06	2.18	.61		.10	.27		7.25
Weeksbury B																																....
Williamsburg‡ C	2.55	.90					T.				.85	.07										T.		T.		.87	1.00		.10	.30		6.64

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

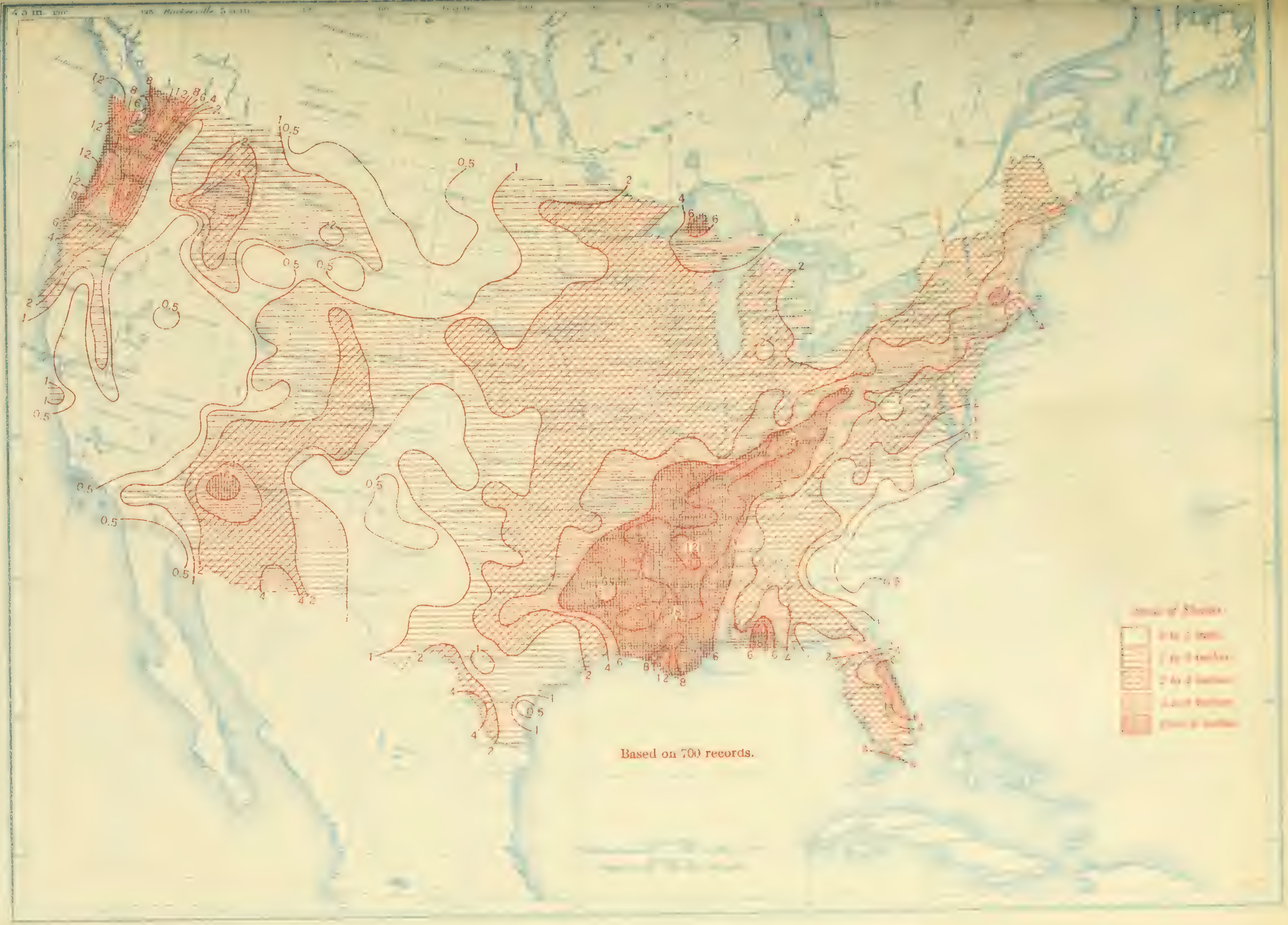
River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for November, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	66	59	68	57	58	61	62	64	74	66	60	60	40	50	59	67	68	68	53	54	66	62	60	62	64	65	50	50	63	54	..	60.3
	Minimum	41	35	38	42	27	32	32	49	49	51	31	34	21	18	23	38	34	34	29	24	30	41	28	30	41	40	40	44	48	26	..	35.0
Blandville	Maximum	65	54	64	54	55	56	56	55	66	63	57	51	39	54	58	61	56	59	49	55	61	64	66	61	63	47	41	48	66	43	..	56.2
	Minimum	41	35	39	38	32	43	45	48	53	52	37	32	22	23	29	33	49	41	31	32	39	40	38	35	47	38	37	36	35	28	..	37.3
Calhoun	Maximum	64	59	66	61	57	58	56	53	70	64	60	55	41	55	59	65	69	59	53	53	65	62	61	60	61	58	45	48	63	53	..	58.4
	Minimum	47	35	37	43	29	36	45	48	51	52	36	34	20	19	26	29	40	36	28	26	34	39	39	31	45	40	38	38	46	26	..	36.4
Earlington	Maximum	67	62	69	57	60	63	55	51	71	65	65	55	42	57	61	67	71	60	52	55	63	63	63	63	66	52	45	50	64	45	..	59.6
	Minimum	54	57	36	36	29	33	46	43	52	54	35	33	23	19	25	30	38	35	30	28	31	42	37	31	43	41	40	39	38	28	..	36.4
Greenville	Maximum	66	58	65	66	55	61	58	55	70	65	61	59	41	52	59	64	66	62	53	53	65	61	64	62	65	..	..	..	..	65	..	^{d}60.4
	Minimum	47	37	35	43	29	34	45	47	52	51	35	33	21	18	24	28	40	34	29	25	30	39	35	30	41	..	..	..	..	29	..	^{d}35.0
Hopkinsville	Maximum	72	61	68	61	66	62	62	55	69	65	62	60	43	56	63	66	68	63	51	62	67	63	62	63	64	61	45	49	63	53	..	60.6
	Minimum	51	47	50	44	32	35	45	46	52	52	35	33	23	19	23	27	36	35	31	35	37	41	34	31	42	43	41	39	47	26	..	37.7
Marion	Maximum	65	57	61	57	56	60	55	54	78	65	60	50	37	52	58	61	65	53	50	56	62	60	62	60	63	50	41	47	65	48	..	57.2
	Minimum	45	52	41	42	31	37	41	48	50	55	40	35	22	22	29	40	43	39	29	30	40	39	37	50	48	38	37	36	40	26	..	38.8
Mayfield §§	Maximum	58	54	65	58	57	64	51	63	66	60	59	55	40	54	60	62	66	62	49	51	64	63	67	64	66	45	43	60	58	45	..	57.6
	Minimum	56	36	38	42	32	36	45	45	50	57	35	34	24	21	22	30	39	38	31	31	35	49	36	34	43	43	39	37	38	27	..	37.4
Owensboro	Maximum	74	61	63	53	55	59	59	55	72	65	60	55	40	51	53	62	65	55	51	53	61	54	59	55	61	58	44	49	54	40	..	56.7
	Minimum	61	59	39	37	34	40	46	49	52	52	37	32	23	22	30	32	39	39	31	28	33	40	35	31	44	40	39	39	40	28	..	37.8
Paducah (Lone Oak)	Maximum	77	76	71	68	66	65	58	56	58	62	58	52	55	47	60	62	56	60	53	49	63	66	66	64	65	63	60	55	68	48	..	61.0
	Minimum	34	36	38	36	33	40	42	44	45	46	40	31	23	22	23	26	28	40	32	31	36	42	36	36	38	37	40	34	36	26	..	35.1
Princeton §§	Maximum	60	56	64	53	56	60	50	..	..	67	55	51	58	50	55	63	66	57	47	49	63	58	46	61	61	..	..	..	..	..	..	^{g}59.8
	Minimum	..	38	35	42	30	40	46	50	..	..	34	31	22	19	25	27	35	36	32	29	30	41	45	40	41	28	..	..	..	..	..	^{g}34.6
Russellville §§	Maximum	67	52	65	59	54	63	51	55	68	57	58	57	43	45	58	66	67	..	..	..	..	61	60	62	62	50	45	60	60	45	..	^{d}57.3
	Minimum	64	43	35	43	31	31	37	47	51	51	37	46	23	18	19	27	33	36	30	27	28	36	39	32	33	49	42	42	43	28	..	36.7
Central Division.																																	
Alpha	Maximum	69	62	54	63	60	60	56	63	69	60	60	62	54	48	56	62	62	58	48	52	52	58	52	52	62	64	52	47	64	58	..	58.0
	Minimum	56	48	35	52	31	35	48	51	53	53	51	54	29	21	21	34	42	31	33	25	31	41	40	31	50	52	44	45	56	53	..	41.2
Anchorage	Maximum	64	56	61	56	51	58	51	56	72	64	61	59	39	49	54	62	65	61	49	48	63	54	56	54	60	54	45	49	65	49	..	56.2
	Minimum	41	38	33	35	24	34	46	44	46	51	34	32	19	16	22	26	38	31	21	29	29	36	32	32	24	38	35	39	42	21	..	33.2
Bardstown	Maximum	69	57	65	65	58	62	57	58	73	60	61	63	45	53	56	65	66	62	56	52	62	68	56	58	61	58	50	50	64	58	..	59.5
	Minimum	56	41	34	34	27	34	48	48	52	50	40	49	22	19	24	28	32	32	25	23	28	38	35	28	39	31	45	41	41	27	..	35.4
Bowling Green	Maximum	72	74	67	60	58	63	60	57	70	65	63	62	45	55	61	65	67	60	50	50	58	62	57	60	62	50	46	50	63	51	..	59.4
	Minimum	65	50	36	47	30	35	43	49	55	50	40	37	24	20	24	28	35	38	29	25	30	40	35	32	40	44	42	43	44	30	..	37.9
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Eubank	Maximum	71	67	62	60	57	65	58	61	70	63	59	61	50	48	53	60	62	60	50	57	61	56	56	56	59	62	45	48	63	55	..	58.5
	Minimum	61	39	33	41	26	34	50	50	54	22	45	56	23	19	22	26	23	30	25	19	27	45	46	25	34	42	39	40	46	29	..	35.6
Frankfort	Maximum	65	56	60	57	50	60	55	56	70	65	62	58	50	47	50	59	61	57	52	47	59	56	55	55	62	60	47	50	63	57	..	56.7
	Minimum	55	42	37	41	31	36	48	47	49	53	43	41	24	22	25	28	35	33	27	23	32	45	39	29	33	41	38	43	48	30	..	37.3
Franklin	Maximum	69	56	66	62	65	67	60	56	69	61	60	63	46	52	61	64	67	63	47	55	65	61	61	62	62	62	46	48	69	55	..	59.8
	Minimum	52	42	36	48	32	35	49	49	55	51	40	39	23	19	27	32	40	39	30	28	35	41	37	35	44	44	42	44	48	28	..	38.9
Greensburg	Maximum	66	61	63	59	54	62	60	58	71	63	61	63	48	50	56	63	64	61	52	52	63	58	59	57	62	63	46	49	66	58	..	59.0
	Minimum	62	41	35	43	26	30	49	50	50	51	43	38	22	17	21	24	29	29	25	20	24	46	33	26	32	40	39	43	46	21	..	35.2
Irvington	Maximum	62	54	61	54	51	58	52	51	70	63	60	56	38	49	53	66	63	57	48	47	49	61	57	56	62	57	45	49	61	45	..	55.2
	Minimum	48	40	37	39	29	36	48	48	51	52	40	35	22	21	28	32	41	40	28	30	25	35	42	30	42	40	38	40	45	28	..	37.0
Junction City	Maximum	67	64	62	58	53	66	58	59	71	64	61	61	51	50	62	61	63	54	50	51	62	65	58	55	62	71	55	65	62	57	..	59.9
	Minimum	63	41	32	40	26	31	49	48	49	52	45	41	22	16	21	25	32	32	22	18	25	47	44	24	55	41	38	40	42	29	..	36.4
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Leitchfield	Maximum	65	54	62	55	52	63	57	56	70	65	59	57	43	48	56	61	63	62	50	52	61	56	57	55	62	58	45	49	64	52	..	57.0
	Minimum	50	40	34	43	29	35	48	48	52	51	38	35	22	19	25	29	37	33	28	24	31	42	38	30	38	41	39	41	47	28	..	36.5
Lexington	Maximum	62	51	85	53	48	61	52	55	69	66	57	56	34	44	51	58	60	54	37	46	57	50	52	50	59	57	44	50	64	37	..	52.9
	Minimum	44	39	40	33	30	36	47	45	50	50	41	29	21	25	32	40	42	31	26	28	38	43	37	35	42	37	36	41	37	26	..	36.9
Louisville	Maximum	64	55	60	53	51	57	53	53	70	61	56	58	37	47	50	60	63	57	44	48	60	53	56	53	60	50	45	52	65	36	..	54.2
	Minimum	43	41	42	37	33	39	50	48	51	52	44	28	22	21	30	35	45	37	32	30	36	41	41	35	42	38	38	40	34	27	..	37.8
Do. (Cherokee Park)	Maximum	65	54	59	55	43	57	52	52	70	64	60	57	43	48	50	60	63	60	51	47	60	57	56	55	59	59	44	49	65	55	..	55.8
	Minimum	52	40	38	43	30	31	48	46	50	53	42	33	22	22	27	29	40	38	27	21	32	42	42	28	39	39	37	40	48	28	..	37.1
St. John	Maximum	65	55	61	59	51	61	59	60	70	63	65	63	39	50	51	63	67	61	61	50	57	60	60	62	64	58	59	62	63	52	..	59.2
	Minimum	52	40	35	37	30	50	47	53	55	40	37	34	21	20	19	42	43	35	30	24	34	31	35	40	28	40	38	39	38	19	..	36.2
Scott	Maximum	63	53	56	51	50	56	53	50	67	62	58	58	40	41	49	58	62	54	45	46	59	51	48	49	56	55	41	46	61	53	..	53.2
	Minimum	46	35	34	40	28	34	48	41	46	50	39	38	20	20	26	30	38	37	23	20	33	34	35	35	35	36	34	38	40	28	..	34.7
Shelbyville	Maximum	64	57	61	56	52	60	55	55	73	69	60	60	46	50	55	62	65	60	51	48	62	54	53	54	58	73	45	49	62	53	..	57.4
	Minimum	50	37	34	40	24	32	44	43	45	45	36	35	18	17	21	28	35	32	20	20	31	39	35	24	36	37	34	38	44	25	..	33.4
Taylorsville	Maximum	65	51	60	56	50	57	54	55	70	62	61	58	43	47	51	58	61	57	52	47	59	54	56	56	62	58	46	50	64	51	..	55.9
	Minimum	53	41	35	43	27	33	47	47	49	52	38	35	22	19	22	25	31	28	23	20	27	44	33	28	32	40	37	41	47	28	..	34.9
Williamstown	Maximum	63	60	59	57	55	59	52	54	72	66	64	62	50	48	52	63	65	55	49	48	61	54	49	55	58	57	41	47	61	51	..	56.3
	Minimum	45	41	37	37	27	37	43	42	45	50	40	42	20	21	26	35	41	36	23	24	33	33	37	25	36	39	34	38	46	26	..	35.3
Eastern Division.																																	
Beattyville	Maximum	71	58	68	65	55	70	59	63	78	67	62	61	54	55	58	66	69	64	52	47	67	60	61	59	60	63	47	48	70	..	..	^{a}61.3
	Minimum	45	40	36	40	29	30	48	49	47	45	50	53	24	20	21	19	27	29	25	18	23	36	32	28	27	45	41	44	46	34	..	35.0
Berea	Maximum	65	57	63	62	59	70	60	65	75	64	62	62	44	49	57	67	65	60	51	49	55	57	59	56	60	63	59	49	66	55	..	59.5
	Minimum	52	40	35	41	26	35	50	49	61	52	46	42	23	18	24	35	43	36	25	19	30	45	41	27	31	42	38	41	44	30	..	37.4
Farmers	Maximum	75	61	60	60	57	67	59	60	74	62	66	63	49	48	54	64	65	50	49	49	64	55	51	55	60	60	46	50	70	60	..	58.9
	Minimum	59	41	32	39	25	29	46	45	45	48	46	47	23	20	20	42	26	28	32	20	22	32	36	24	25	44	40	41	45	20	..	34.6
Harlan	Maximum	72	65	67	64	63	65	58	72	71	61	60	59	52	55	..	..	..	..	..	..	..	..	62	59	72	65	55	56	67	61	..	^{h}62.8
	Minimum	64	49	39	45	32	32	42	49	48	51	51	50	31	22	..	..	..	..	..	..	..	..	32	30	31	54	47	45	52	36	..	^{h}42.4
Maysville	Maximum	68	63	59	57	55	52	55	58	70	65	61	61	58	47	50	59	63	57	51	46	61	56	51	50	60	59	50	48	66	60	..	57.4
	Minimum	61	44	38	45	32	35	46	41	45	52	47	46	21	22	27	28	35	37	27	22	30	47	38	29	32	44	38	41	45	31	..	37.8
Middlesboro	Maximum	71	67	66	65	59	62	61	68	69	61	60	58	52	51	55	58	60	63	55	52	58	60	61	59	56	66	55	55	64	60	..	60.3
	Minimum	65	48	40	40	31	30	42	49	49	48	48	52	29	19	20	21	19	26	31	19	22	41	35	29	30	55	46	45	51	36	..	37.3
Mount Sterling	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Richmond	Maximum	69	64	63	59	55	67	59	63	75	68	63	62	53	48	56	63	64	62	48	48	61	57	57	54	60	63	47	48	65	57	..	59.3
	Minimum	62	43	38	47	28	31	50	48	53	52	46	49	24	22	28	34	42	46	25	23	32	45	39	28	38	43	38	42	46	30	..	39.2
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Williamsburg	Maximum	..	..	..	..	58	65	59	68	70	71	61	65	57	53	56	65	65	63	61	54	61	64	62	61	63	65	62	61	66	61	..	^{d}62.2
	Minimum	64	43	47	45	30	32	47	52	53	50	51	51	27	20	23	28	26	30	29	20	36	40	39	38	42	49	42	43	43	30	..	39.0

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.



Based on 700 records.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

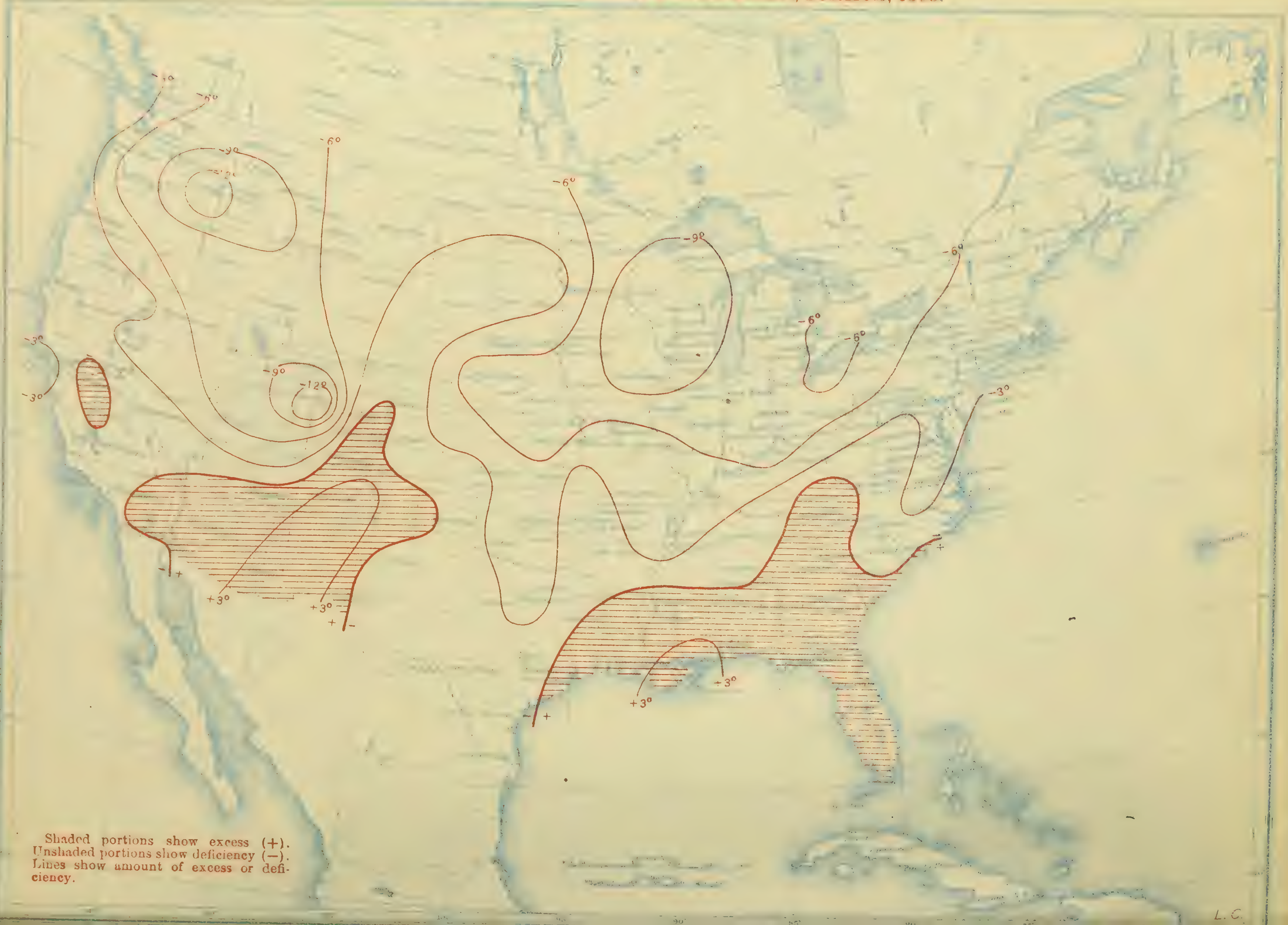
KENTUCKY SECTION

DECEMBER, 1919

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY
WEATHER BUREAU OFFICE
FEBRUARY 15, 1920

Departure of the Mean Temperature from the Normal, December, 1919.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., December, 1919. No. 12

GENERAL SUMMARY.

The weather during December was decidedly cold, wet, and generally unfavorable. The heavy rains of the first two weeks interfered seriously with all outdoor work, especially corn gathering; and caused floods in headwater streams which were attended by considerable loss of crops in creek and river bottoms. These rains also caused much damage to farm lands on hillsides and along the smaller streams from soil erosion. This was the third month in succession with rainfall largely in excess of normal—the three months constituting a period remarkable for the recurrence and persistence of weather conditions unfavorable for fall planting and harvest.

Fair weather and frozen ground during the last half of the month permitted the resumption of corn gathering, but much of this crop still remained in the field at the end of the month. The hard freezing of the saturated soil caused considerable injury to winter wheat. Snowfall was light and afforded no protection of consequence.

PRESSURE.

The most important low pressure areas affecting weather conditions over this section during the month were: (1) 6-7th, moving from the lower Missouri Valley across the Ohio Valley, attended by heavy rains; (2) 9th, extending in a trough from the Lake Region to the Middle Gulf section, attended by moderate to heavy rains; (3) 12-13th, extending in a deep trough from the Lake Region to the lower Mississippi Valley, attended by heavy rains; and (4) 28th, a shallow "low" which formed over the Ohio Valley and lower Appalachian section, attended by snow over most of the State. Notable cold waves were carried over this State by the "highs" of the 9-10th and 13-14th. During the last half of the month high pressure areas over the interior, attended by fair weather and unseasonably low temperature, dominated weather conditions.

The mean sea-level pressure, based on the records of two stations, was 30.20 inches. The extremes were 30.95 inches on the 10th and 29.45 inches on the 6th, both at Louisville.

TEMPERATURE.

The average temperature for the State, 40 stations reporting, was 34.6°, which is 2.5° below normal. Moderate temperatures occurred on the 1st, 6-8th, 12-13th, and 30th-31st; but minimum temperatures were generally low and average temperatures below normal on most days. The coldest days were the 10th and 14th, with minimum temperatures at most stations ranging from 6° to 13°. The extremes at the various stations were 68° at Bowling Green on the 31st, and 3° at Lone Oak, near Paducah, on the 10th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 55 stations, averaged 4.93 inches, which is 0.99 inch above normal, Heavy rains occurred in the periods 6-7th, 9-10th, and 13-14th, 24-hour amounts ranging from one to three inches at nearly all stations on the 6th and 13th. The heaviest rainfall occurred over the blue grass region, where amounts ranged from six to nearly eight inches. Over the western counties amounts were generally between three and five inches, and over the eastern counties between four and six inches. Monthly amounts at the various stations ranged between 7.80 inches at Mt. Sterling and 2.15 inches at Beaver Dam.

WIND.

The total wind movement at Louisville was 9,014 miles and at Lexington 9,997 miles, with average hourly velocities of 12.1 and 13.4 miles, respectively. The maximum velocity for five minutes was at the rate of 42 miles per hour from the northwest at Louisville and 56 miles from the southwest at Lexington on the 6th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was [illegible] per cent, at 12 noon 69 per cent, and at 7 p. m. 73 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was [illegible] and at Lexington 38.

MISCELLANEOUS

Rivers.—The swell in the upper Ohio was subsiding, but the lower river was still rising on the 1st. Flood stage was reached at Evansville on the 1st and a crest of 39.0 feet on the 4th. A crest of 40.5 feet was reached at Cloverport on the 2d. This tide had not fully subsided in the upper river—flood conditions still prevailing in the lower river—when the heavy rains of the 6-7th started another rapid rise, which was further augmented by moderate to heavy rains on the 9th. The river continued above flood stage at Evansville through this period, and finally reached a stage of 42.3 feet on the 16th. Flood stage was again reached at Cloverport on the 11th, and a stage of 44.9 feet on the 14th. Stages of 27.2 feet (upper gage) and 52.9 feet (lower gage) were reached at Louisville on the 14th. Flood stages were not reached at stations above Louisville. The damage in both floods was mostly to crops caught in low bottoms and carried away by headwater or overflowed by backwater from the Ohio. Most of the loss of corn occurred in the western portion of the State, and was estimated at more than $400,000.

COMPARATIVE DATA FOR DECEMBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more.
1889	50.2	+13.1	76	[illegible]	1.57	−2.37	.
1890	37.8	+0.7	70	12	3.51	−0.43	..
1891	42.4	+5.3	70	15	4.10	+0.16	..
1892	34.6	−2.5	74	−3	[illegible]	+0.28	.
1893	39.0	+1.9	[illegible]	[illegible]	2.69	−1.25	
1894	[illegible]	+1.6	[illegible]	−11	4.31	+0.37	10
1895	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	+0.49	[illegible]
1896	39.6	+2.5	73	[illegible]	1.82	−2.12	[illegible]
1897	38.0	+0.9	72	[illegible]	[illegible]	−0.19	10
1898	[illegible]	−3.0	70	−12	2.74	−1.20	[illegible]
1899	34.8	−2.3	70	−15	4.26	+0.32	10
1900	35.6	+1.5	70	12	2.59	−1.35	[illegible]
1901	32.3	−4.8	[illegible]	−22	[illegible]	+0.96	10
1902	[illegible]	−0.4	72	−3	7.36	+3.42	12
1903	30.7	−6.4	58	[illegible]	2.88	−1.66	[illegible]
1904	[illegible]	−0.7	[illegible]	−2	[illegible]	+0.36	[illegible]
1905	37.3	+0.2	66	[illegible]	[illegible]	+0.44	[illegible]
1906	39.0	+1.9	[illegible]	9	[illegible]	+1.70	15
1907	[illegible]	+1.4	70	[illegible]	3.20	−0.74	[illegible]
1908	[illegible]	+2.7	[illegible]	[illegible]	2.42	−1.52	[illegible]
1909	[illegible]	−7.2	[illegible]	14	[illegible]	−0.48	[illegible]
1910	[illegible]	−6.0	[illegible]	−3	3.37	−0.57	[illegible]
1911	[illegible]	+4.5	[illegible]	[illegible]	[illegible]	+2.31	12
1912	37.2	+0.1	73	5	[illegible]	+0.04	9
1913	39.5	+2.4	[illegible]	[illegible]	[illegible]	−1.21	7
1914	[illegible]	−4.3	[illegible]	−16	5.22	+1.28	[illegible]
1915	[illegible]	−0.1	[illegible]	9	7.56	+3.62	12
1916	[illegible]	−1.6	[illegible]	[illegible]	4.23	+0.29	10
1917	[illegible]	−10.6	[illegible]	−21	2.01	−1.93	8
1918	[illegible]	+7.7	75	[illegible]	[illegible]	+0.50	12
1919	[illegible]	−2.5	68	[illegible]	4.93	−0.99	7

Climatological data for December, 1919.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	16	36.4	+ 0.8	62	7	9	10	41	2.15	−1.80	1.00	......	3	8	17	6	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	37	34.5	− 2.3	64	31	7	10	38	3.84	−0.09	1.82	1.0	8	11	3	17	sw.	E. W. Horr.
Calhoun	McLean	437	15	a34.3	− 3.1	63	31	7a	10	40a	4.32	+0.15	1.83	0.2	4	11	5	15	nw.	W. A. Taylor.
Earlington	Hopkins	420	28	35.8	− 2.3	65	31	9	10	40	3.46	−0.35	1.79	T.	6	15	0	16	n.	Brick Southworth.
Greenville	Muhlenburg	519	2	c35.6	......	65c	7	8c	10	41c	3.05	.....	1.40	......	4	12c	6c	10c	s.	C. R. Lovell.
Henderson	Henderson	327	11	.....	......	.....	.....	.....	.....	.....	3.20	−0.81	1.20	0.5	5	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	22	36.1	− 1.7	65	31	8	10	39	3.53	−1.24	1.80	T.	7	11	6	14	n.	W. E. Graves.
Marion	Crittenden	571	20	33.6	− 3.9	62	6†	7	10†	41	4.72	+0.90	2.65	T.	4	14	3	14	n.	B. C. Paris.
Mayfield	Graves	364	9	d34.1	− 4.5	63d	7	9c	10†	37c	3.43	−0.93	2.50	T.	3	9b	6b	14b	n.	J. N. Davis.
Owensboro	Daviess	479	22	33.6	− 3.0	61	6	7	10†	38	4.95	+1.06	2.42	T.	4	14	4	13	nw.	Henry S. Berry.
Paducah (near)	McCracken	341	19	32.4	− 6.2	56	6†	3	10	36	4.31	......	2.00	T.	7	13	0	18	s.	E. Futrell, Jr.
Princeton	Caldwell	529	9	d33.4	− 3.3	61d	6	9d	14	40d	2.84	−1.60	1.36	......	3	15d	0d	12d	w.	Ray Baker.
Russellville	Logan	590	6	34.6	......	64	6	7	15	38	3.50	......	1.45	1.0	6	12	4	15	n.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	40.9	+ 0.5	66	9	15	15	36	2.30	−2.44	1.10	1.0	4	5a	9a	16a	w.	Taylor Davis.
Anchorage	Jefferson	700	18	30.8	− 3.1	60	7†	6	10	37	5.97	+1.97	2.63	1.0	6	14	1	16	nw.	C. E. Barret.
Bardstown	Nelson	637	22	33.9	− 1.8	62	31	9	14	39	6.29	+1.93	2.95	1.0	7	16	8	7	e.	Chas. M. Talbott.
Bowling Green	Warren	500	28	36.5	− 1.4	68	31	11	10†	37	4.74	+0.42	1.06	1.0	9	13	4	14	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	1	.....	.....	.....	.....	.....	.....	.....	4.61	.....	1.24	0.1	10	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	26	.....	.....	.....	.....	.....	.....	.....	5.54	+1.25	2.04	0.5	7	.....	.....	.....	.....	F. E. Bradshaw.
Carrollton (Lock No.	Carroll	492	20	.....	.....	.....	.....	.....	.....	.....	4.33	+1.33	1.67	.....	8	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	5	.....	.....	.....	.....	.....	.....	.....	5.19	......	1.85	T.	6	.....	.....	.....	.....	W. A. Cockerill.
Edmonton	Metcalfe	600	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eubank	Pulaski	1177	24	35.2	− 0.5	62	9	8	15	40	6.08	+2.66	2.12	4.0	8	9	3	19	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	26	33.6	− 3.7	62	13	11	10	37	6.88	+3.29	2.70	0.2	7	13	4	14	s.	Mrs. Amelia Wood
Franklin	Simpson	691	23	37.8	− 2.2	65	6†	10	14†	36	5.68	+1.40	1.96	0.8	5	13	3	15	n.	Prof. V. P. Atkinson.
Greensburg	Green	581	26	a35.7	− 0.3	62a	6†	[illegible]a	14†	37a	4.92	+0.76	1.82	0.5	8	7	1	23	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	16	.....	.....	.....	.....	.....	.....	.....	7.54	+3.14	2.50	1.0	10	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	21	33.9	− 2.1	62	7	7	10	38	5.93	+2.03	3.05	T.	5	14	4	13	sw.	W. J. Piggott.
Junction City	Boyle	985	25	35.8	+ 0.5	62	7†	10	14†	35	6.49	+2.23	1.77	5.5	9	18	7	6	sw.	Prof. E. L. Grubbs.
Lebanon	Marion	754	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leitchfield	Grayson	635	23	34.6	− 1.2	62	31	8	10	37	5.17	+0.55	2.08	T.	6	11	6	14	nw.	John E. Stone.
Lexington	Fayette	989	31	31.0	− 5.4	60	6	9	10	39	6.70	+3.38	3.63	2.3	7	9	4	18	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	46	32.3	− 5.8	61	6	8	10	40	5.89	+2.16	2.80	1.2	7	12	5	14	n.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	9	32.5	− 2.4	59	7	8	10	36	6.07	+1.90	2.90	0.5	5	12	8	11	nw.	Wm. I. Hunt.
St. John	Hardin	777	22	a33.2	− 1.4	62	7	8a	10	36a	5.94	+1.52	2.40	0.5	6	17	3	11	.....	Sisters of Loretto.
Scott¶	Kenton	900	21	29.6	− 3.6	59	13	7	10	37	3.95	+0.74	1.60	0.6	6	10	5	16	s.	E. B. Wilson.
Shelbyville	Shelby	825	30	30.0	− 5.0	57	13	6	10	38	5.62	+1.73	2.84	1.0	6	13	9	9	sw.	F. A. Miller.
Taylorsville	Spencer	489	16	32.5	− 2.6	62	7	9	10	36	6.43	+2.01	2.70	0.3	7	11	3	17	sw.	E. D. Bourne.
Williamstown	Grant	943	16	32.4	− 0.5	59	3	8	10	36	2.59	−1.01	1.50	0.4	7	4	15	12	.....	Miss Rose Carter.
Woodbury	Butler	533	1	.....	.....	.....	.....	.....	.....	.....	3.39	.....	1.08	T.	9	.....	.....	.....	.....	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	15	f36.1	+ 2.0	65f	31	9	15	42f	5.41	+0.74	1.29	0.2	8	2	9	20	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	17	34.8	− 1.9	62	6†	8	15	38	6.90	+2.31	1.94	1.0	7	16	2	13	nw.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	30	.....	.....	.....	.....	.....	.....	.....	5.11	+1.61	1.96	2.7	9	.....	.....	.....	.....	Forester Farley.
Cynthiana	Harrison	684	1	.....	.....	.....	.....	.....	.....	.....	6.25	.....	2.10	1.0	7	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	30	.....	.....	.....	.....	.....	.....	.....	4.30	+0.95	1.53	0.6	7	11	4	16	se.	J. V. Oldham.
Farmers	Rowan	668	11	33.4	− 1.7	62	13†	10	15†	40	4.44	+0.69	2.30	.....	3	12	16	3	w.	Miss Margaret Carter.
Harlan	Harlan	1197	1	i40.6	.....	64i	7	18i	25	40i	4.60	.....	.....	.....	.....	.....	.....	.....	.....	Will Ward Duffield.
Jackson	Breathitt	776	7	.....	.....	.....	.....	.....	.....	.....	5.94	+2.34	2.10	T.	6	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	4	.....	.....	.....	.....	.....	.....	.....	4.59	.....	1.40	5.5	8	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	15	.....	.....	.....	.....	.....	.....	.....	5.84	+2.68	2.41	.....	11	.....	.....	.....	.....	Miss Carrie S. Adams.
Maysville	Mason	524	21	32.2	− 1.6	62	13	12	14†	35	5.90	+2.14	1.50	.....	7	11	6	14	n.	Harry M. Robinson.
Middlesboro	Bell	1128	21	39.6	+ 1.7	61	7	11	15	47	4.02	−0.13	1.15	0.0	8	17	10	4	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	29	32.7	− 2.2	62	13	8	15	40	7.80	+3.56	3.00	3.5	9	12	3	16	w.	W. R. McKee.
Pikeville	Pike	634	13	.....	.....	.....	.....	.....	.....	.....	3.80	−0.46	1.42	.....	8	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	24	35.0	+ 2.1	63	31	10	15	35	6.02	+2.36	2.00	2.8	11	14	4	13	.....	J. W. Crooke.
Vanceburg	Lewis	525	.....	.....	.....	.....	.....	.....	.....	.....	5.84	.....	2.47	.....	8	.....	.....	.....	.....	Samuel Johnson.
Weeksbury	Floyd	1216	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. V. Johnson.
Williamsburg	Whitley	939	21	41.4	+ 3.1	65	31	12	15	43	3.09	−0.60	0.95	0.2	7	11	2	18	nw.	N. C. Jones.
State averages and extremes	.....	.....	.....	34.6	.....	68	31	3	10	47	4.93	.....	3.63	1.0	7	12	5	14	n.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡Post-office address, Normal, Ky; ‡‡Nerinx, Ky; ¶Covington, Ky.

Daily Precipitation for December, 1919.

Stations.	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																															
Beaver Dam ‖ G						1.00	.60		.55																		.04	[illegible]				[illegible]
Blandville ‖ M		T	T	.13	.03	.50		.91	.39				1.82															[illegible]				[illegible]
Calhoun G		T.		T	T.	1.69	.21		.59	T.		T.	1.83									T						[illegible]				[illegible]
Earlington ‖ G						.31	.86		.25	.16			1.79																			[illegible]
Greenville G						1.00	.15		.50				1.40																			[illegible]
Henderson ‖ O						1.13		[illegible]	.19				1.20															[illegible]				[illegible]
Hopkinsville ‖ C				.01	.06	.86	.18	T	.60			T.	1.80	T														[illegible]				[illegible]
Marion O		T.				.85	.27		.55				2.65														T.					[illegible]
Mayfield ‖ M			T.			.28			.65				2.50	T																		[illegible]
Owensboro ‖ O						2.42	T		.47			T	1.92															.14				[illegible]
Paducah (near) O		T.	T.	.02	.55	.74			.90			.04	2.00															[illegible]				[illegible]
Princeton ‖ G						1.36	1.27		.21																							[illegible]
Russellville ‖ G						.30	.60		.70	.40			1.45	.05																		[illegible]
Central Division.																															
Alpha C						.90		.13		.17			1.10																			[illegible]
Anchorage O						2.63	.09		.78			T.	2.33				T		.04									.10	T			5.97
Bardstown ‖ S						2.95	.27		.97			.03	1.70	.12														.25				[illegible]
Bowling Green ‖ G					.10	.28	1.06		1.00	.55		.45	1.00	.20														.10				[illegible]
Brownsville ‖ G					.03	.47	1.24		.86	.39			.94	.54			.04											.08	.02			[illegible]
Burnside ‖ C					T.	.54	2.04	T.	.43	.10		T.	1.10	.95					T.										.38			[illegible]
Carrollton ‖ (Lock No. 1) O						.22	1.30	.90		.08			1.67	.07															.02			[illegible]
Cloverport ‖ O						1.38	1.50		.22	.15			1.85	.09					T.									T.	T			[illegible]
Edmonton G																																
Eubank ‖ C							2.12		.55	.45			1.30	1.28					.08									.20	.10			[illegible]
Frankfort ‖ K					T.	.92	2.70		1.05	.30		T.	1.60	.29					T.	T.									.02	T.		[illegible]
Franklin G				T.		.35	1.95		1.30				1.80	.28																		[illegible]
Greensburg ‖ G						.94	.54		.85	.34			1.82	.14					.04									.25				[illegible]
High Bridge ‖ K						1.57	2.50		1.18	.23			1.15	.56					.06	.01								.15	.13			[illegible]
Irvington O					T.	3.05	.20		.66				2.00						T.								.02	T				[illegible]
Junction City K						1.75	.78		1.32	.18			1.77	.23					.11								.02	.30				[illegible]
Lebanon S																																
Leitchfield G						2.08		*	.83			*	1.90															.36				5.17
Lexington *** K					T.	3.63		.51	.99			.32	1.19	T			T		.03									.23	T			[illegible]
LOUISVILLE*** O		T.			.07	2.73		.06	.73			1.20	.98				T.		T.			T						.12	T.			[illegible]
Do. (Cherokee Park) O							2.90		.66	.15			2.20						T									.16				6.07
St. John ‖ S					T.	2.40	.29		1.04			T	2.00						.03									.18				[illegible]
Scott L						.71	.69		.71	T.			1.60	.18			T.	T.	T.									.16	T.			[illegible]
Shelbyville ‖ S						2.84	.67		.72				1.18						.11									.10				[illegible]
Taylorsville S			T.		T.	2.70	.76		.70	.15			1.92	T.					.07									.13				[illegible]
Williamstown ‖ L						1.50	.45		.48	.08			.02	.02					T.									.04				[illegible]
Woodbury ‖ G					.03	.36	1.08		.29	.32			1.05	.16														.09	.01			[illegible]
Eastern Division.																															
Beattyville ‖ K					T.	.90	1.26		.32	.21			1.13	1.29					T.	.15				T				.15	T.			[illegible]
Berea K						1.64	.46		.24				1.94	1.50														.12	1.00			[illegible]
Catlettsburg ‖ B						.32	1.96		.55	.13			.82	1.12						.12									.05		.04	[illegible]
Cynthiana ‖ L						.60	2.10		1.40	.15			1.50	.50																		[illegible]
Falmouth ‖ L						.40	1.53		.60	.16			1.40	.15				T.	T.									.06	T	T		[illegible]
Farmers L						2.30			.64				1.50																			[illegible]
Harlan K					.80	.48	1.05	.05	.48						1.66													.18				[illegible]
Jackson ‖ K					T.	.95	2.10		.97	T.		T.	.62	1.60					T.	.30		T.						T				[illegible]
London ‖ C					.24	.55	1.40		.50				.90	.50														.30	.20			[illegible]
Louisa ‖ B						.48	2.41		.40	.18			1.03	.99	.01			T.	T.	.05							.05	.05	.19			[illegible]
Maysville ‖ O						.33	2.10		1.18	.16			1.50	.54				T										.09	T			[illegible]
Middlesboro C					.03	.40	1.15	.03	.72	.20			.97						.52													[illegible]
Mount Sterling ‖ L			T.		T.	3.00	1.03		1.22	.06		T	2.02	.22			T.	T	.03								T	.20	.02			[illegible]
Pikeville ‖ B						.42	1.42		.18	.12			.94	T.				.32	.18							T.	.22	T.	T.			[illegible]
Richmond ‖ K					T.	.75	2.00		.80	.27	T.	T.	1.60	.19					.05		.03						.03	.16	.14			[illegible]
Vanceburg O						.40		2.47	1.07	.19			1.05	.60										.03				.03				[illegible]
Weeksbury B																																
Williamsburg ‖ C					T.	.55	.75		.28	.28			.16	.95						T.								T.	.12			[illegible]

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

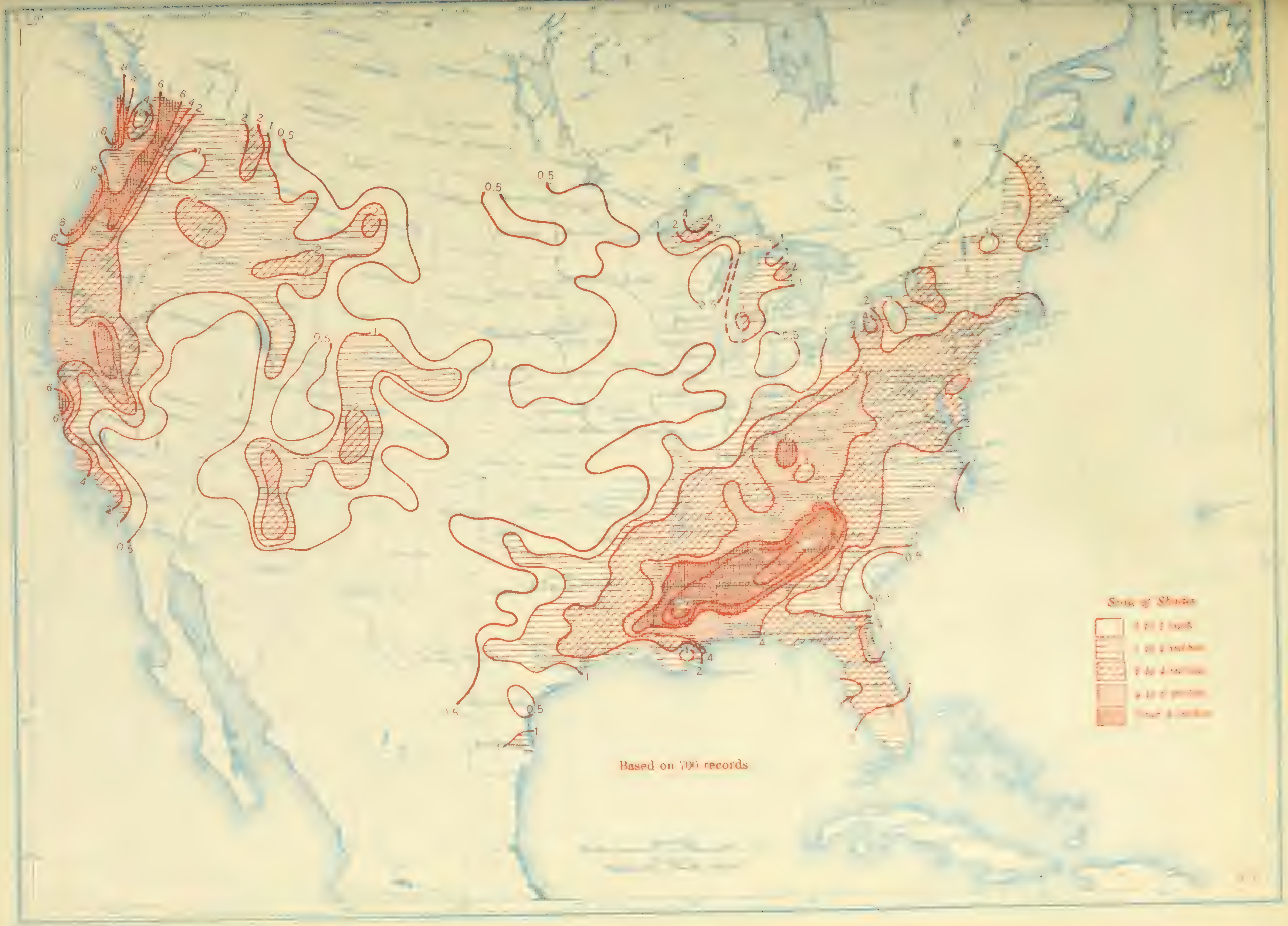
River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi

Daily temperatures for December, 1919.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	57	48	38	41	41	52	62	46	46	34	53	56	53	57	27	45	40	51	46	45	51	50	41	45	45	49	48	44	41	55	54	47.5
	Minimum	28	29	28	20	20	35	35	22	33	9	12	30	39	18	18	23	29	23	28	27	23	22	15	14	14	12	27	30	28	31	39	25.3
Blandville	Maximum	55	47	39	55	38	63	48	38	38	21	46	55	55	25	35	43	38	53	45	40	48	37	32	34	39	36	46	41	47	56	64	42.8
	Minimum	30	28	25	28	24	37	35	30	14	7	14	39	17	9	15	23	29	28	27	21	25	25	27	29	19	29	29	32	29	34	43	26.2
Calhoun	Maximum	54	50	33	48	35	58	61	41	42	29	50	54	57	20	34	31	41	49	40	42	45	39	39	37	40	57	46	41	40	52	63	43.7
	Minimum	25	31	25	20	33	35	35	33	28	7	15	39	17	8	15	16	..	22	26	20	22	24	25	25	17	28	26	30	26	33	39	a24.9
Earlington	Maximum	59	46	32	38	39	63	63	41	42	21	53	57	59	20	38	44	39	53	44	43	47	31	39	34	43	37	49	42	44	57	65	41.6
	Minimum	27	31	24	23	35	38	35	31	21	9	16	40	19	10	15	23	30	27	25	20	21	25	27	28	17	31	29	32	38	37	46	26.9
Greenville	Maximum	56	48	35	58	40	64	65	50	44	29	50	56	60	22	36	44	40	50	50	42	47	39	43	..	..	41	..	45	43	54	64	c46.4
	Minimum	26	38	27	21	35	37	37	32	26	8	11	37	19	8	13	21	27	24	27	20	20	24	25	..	..	12	..	27	26	31	39	c24.9
Hopkinsville	Maximum	57	51	35	37	40	63	63	44	45	31	53	54	58	24	36	46	42	57	51	41	44	44	45	38	42	40	47	43	45	58	65	46.6
	Minimum	26	31	28	22	34	35	38	33	29	8	17	36	19	9	12	19	25	25	31	23	25	24	23	29	19	25	26	31	26	31	34	25.6
Marion	Maximum	54	48	28	34	39	62	62	38	38	23	51	55	57	23	35	41	37	50	42	41	47	41	31	31	40	56	42	38	45	51	61	42.6
	Minimum	30	27	25	33	33	31	33	25	22	7	15	25	16	7	15	25	26	25	20	19	25	24	26	25	18	30	25	30	26	28	40	24.7
Mayfield §§	Maximum	57	58	35	38	58	60	63	34	38	27	50	59	..	24	30	43	43	55	34	38	45	29	32	24	42	36	47	..	49	..	..	d42.4
	Minimum	28	33	27	28	34	37	35	34	30	9	13	27	..	9	14	23	27	27	29	22	21	24	26	28	20	28	27	33	..	29	..	c25.8
Owensboro	Maximum	52	45	45	42	39	61	45	43	42	31	45	51	52	20	32	41	52	46	41	41	46	39	57	31	39	35	43	35	41	49	59	42.0
	Minimum	28	32	25	22	35	35	33	30	25	7	7	42	19	9	15	16	25	26	25	24	22	25	30	25	20	31	27	32	30	50	25	25.1
Paducah (Lone Oak)	Maximum	55	52	46	35	55	56	34	36	40	20	42	53	52	20	35	28	42	46	46	35	43	47	31	33	32	33	32	31	36	40	56	40.3
	Minimum	27	28	24	26	33	34	30	30	15	3	11	35	16	8	15	24	25	26	25	24	23	25	26	24	20	25	26	25	30	34	39	24.4
Princeton §§	Maximum	..	54	31	37	51	61	40	39	40	23	50	58	29	21	30	41	36	50	32	40	42	30	34	..	34	35	..	39	..	53	58	d40.3
	Minimum	28	..	29	23	36	37	39	31	36	9	10	46	29	9	12	19	25	24	19	21	21	25	28	31	..	28	25	..	29	..	44	d26.4
Russellville §§	Maximum	55	48	32	40	56	64	45	47	46	40	52	58	22	23	35	42	41	54	56	41	50	36	41	34	43	40	48	41	48	53	63	44.5
	Minimum	25	26	29	22	29	37	39	35	36	11	12	20	20	8	7	12	23	26	33	24	23	24	25	30	17	20	29	30	27	29	38	24.7
Central Division.																																	
Alpha	Maximum	50	50	45	40	46	62	59	61	66	53	55	63	56	52	31	46	43	52	43	40	38	41	55	38	36	44	48	49	36	47	61	48.6
	Minimum	26	35	32	27	41	38	48	41	50	18	19	51	52	17	15	28	30	40	40	23	23	29	25	35	18	37	34	36	24	36	52	33.2
Anchorage	Maximum	51	44	36	37	37	58	60	31	45	25	47	57	57	21	27	39	36	34	28	38	34	31	42	36	39	36	42	35	34	45	60	40.2
	Minimum	20	25	16	14	33	32	32	29	21	6	14	36	20	8	14	23	21	17	23	15	17	15	21	25	13	24	30	24	17	27	28	21.5
Bardstown	Maximum	51	46	37	42	40	60	59	47	47	34	51	57	60	39	37	44	40	38	36	37	32	31	46	39	39	40	40	38	35	49	62	43.6
	Minimum	24	30	23	15	29	35	32	33	32	10	12	39	23	9	11	20	27	27	27	19	21	19	21	28	17	21	32	29	23	33	30	24.2
Bowling Green	Maximum	58	50	35	37	40	63	63	48	47	45	50	63	42	24	35	42	40	54	51	44	48	35	42	37	40	44	44	42	42	56	68	46.0
	Minimum	25	35	28	21	28	39	39	35	34	11	13	26	22	11	11	21	29	24	35	21	22	24	27	33	18	22	25	28	29	31	40	26.4
Edmonton	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	52	49	37	40	40	61	61	50	62	49	52	60	58	30	32	40	37	49	47	40	43	46	49	43	41	42	40	36	31	45	53	45.6
	Minimum	22	28	24	17	30	36	34	35	46	11	12	41	24	13	8	17	25	21	27	23	20	21	23	27	18	22	23	26	21	30	32	24.7
Frankfort	Maximum	47	46	43	37	38	58	61	45	53	46	46	58	62	26	36	39	39	33	32	35	34	41	42	42	35	38	39	39	34	42	59	42.5
	Minimum	25	29	21	19	29	34	36	34	42	11	17	35	25	13	14	18	21	20	24	19	22	21	24	30	17	23	13	29	20	32	27	24.7
Franklin	Maximum	58	50	37	43	60	65	63	51	55	35	52	54	57	24	28	44	43	57	55	50	47	39	45	28	43	46	46	42	40	55	65	48.2
	Minimum	25	35	25	23	31	36	40	37	53	11	19	41	21	16	10	24	30	27	33	28	23	24	25	21	19	28	30	29	26	31	42	27.3
Greensburg	Maximum	54	50	38	41	41	62	62	48	55	46	53	59	61	31	33	42	40	57	50	40	45	39	45	45	40	43	41	39	35	..	61	a46.5
	Minimum	33	26	24	17	35	36	37	35	43	10	16	43	28	8	8	12	28	20	28	20	18	23	22	28	17	19	29	30	21	..	29	a24.9
Irvington	Maximum	50	42	32	29	38	61	62	43	47	27	48	55	58	21	32	41	35	40	33	39	44	44	38	37	38	37	44	41	42	47	60	42.4
	Minimum	26	31	23	20	35	35	35	32	27	7	12	41	20	9	16	21	26	21	27	19	22	25	21	27	18	30	30	28	30	32	41	25.4
Junction City	Maximum	51	49	56	50	45	61	62	55	60	46	48	61	58	28	32	42	46	45	39	32	41	45	47	41	41	41	41	37	43	56	62	47.0
	Minimum	32	38	19	15	35	35	37	34	42	11	15	39	27	16	10	11	25	18	26	19	16	19	21	28	20	21	32	28	20	31	28	24.6
Lebanon	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Leitchfield	Maximum	54	46	33	38	38	60	60	44	47	32	48	54	57	25	33	43	37	47	40	40	46	40	44	39	35	38	40	39	36	49	62	43.5
	Minimum	26	32	26	19	34	37	36	32	32	8	17	40	20	10	13	19	28	22	28	21	21	24	24	29	18	25	20	29	26	32	35	25.6
Lexington	Maximum	48	43	25	34	35	60	50	45	53	20	48	58	57	18	27	36	34	29	28	35	33	41	43	34	35	35	35	35	38	40	58	39.2
	Minimum	28	25	20	20	23	32	33	22	18	9	16	43	18	9	11	20	18	18	20	17	21	24	25	26	18	20	30	23	19	20	39	22.9
Louisville	Maximum	47	41	32	38	38	63	48	44	47	21	47	59	59	19	30	38	36	34	29	38	37	30	42	34	35	35	43	28	40	44	60	40.1
	Minimum	29	27	22	23	31	31	33	31	14	8	17	42	19	9	16	21	23	21	24	20	24	21	26	25	19	31	31	25	24	33	35	24.5
Do. (Cherokee Park)	Maximum	46	46	32	36	[illegible]	63	59	43	46	38	45	54	58	23	30	38	39	33	32	36	30	33	41	40	25	35	42	41	35	42	58	40.7
	Minimum	25	25	15	18	35	34	34	30	37	8	15	35	22	10	16	18	23	19	24	16	21	20	26	20	16	25	32	28	23	33	32	24.3
St. John	Maximum	50	46	45	57	55	60	62	43	46	23	48	55	58	23	33	45	36	44	38	28	45	31	32	40	45	37	40	39	34	47	61	43.1
	Minimum	17	18	15	17	34	40	35	31	..	8	16	40	21	10	14	19	18	21	27	19	20	23	14	20	25	25	30	28	24	30	30	a23.2
Scott	Maximum	43	57	37	36	34	49	48	38	43	40	40	54	59	22	29	38	35	22	24	36	45	38	39	35	34	36	41	55	29	42	56	38.5
	Minimum	27	26	17	14	28	31	32	28	34	7	12	32	22	10	15	14	18	13	18	18	15	19	18	25	8	25	31	25	11	28	29	20.8
Shelbyville	Maximum	49	45	32	37	56	56	56	43	46	36	47	56	57	22	31	37	37	33	29	37	29	42	37	37	39	36	40	33	32	39	50	39.8
	Minimum	21	28	11	15	27	30	31	28	26	6	13	33	19	8	11	15	19	16	21	13	11	16	22	23	13	22	29	25	16	24	30	20.1
Taylorsville	Maximum	47	45	33	39	38	58	62	44	49	40	46	57	59	21	31	39	38	37	33	34	30	33	39	36	34	39	40	37	34	43	58	41.2
	Minimum	23	26	20	17	34	34	35	31	39	9	17	23	23	11	13	17	21	20	25	18	26	19	25	28	17	21	32	28	22	31	27	23.8
Williamstown	Maximum	47	45	37	35	35	52	58	51	50	44	42	55	56	41	32	41	35	29	29	39	47	47	47	35	46	36	40	35	31	44	59	42.6
	Minimum	21	25	18	18	28	31	31	39	38	8	13	25	24	10	13	15	18	13	20	12	20	19	21	25	12	26	31	24	17	28	29	22.1
Eastern Division.																																	
Beattyville	Maximum	..	..	..	..	..	..	61	56	56	56	50	64	63	37	35	45	41	44	39	34	34	46	50	40	45	47	50	38	33	50	65	f46.5
	Minimum	23	24	28	17	30	35	41	35	46	15	15	33	35	18	9	12	28	22	27	23	25	24	26	29	20	17	32	30	23	31	23	25.7
Berea	Maximum	56	50	35	46	41	62	59	49	62	41	53	61	60	28	40	41	41	38	36	38	42	46	46	41	44	46	43	15	38	41	46	45.5
	Minimum	23	30	28	16	26	34	37	34	41	13	15	35	28	12	8	15	22	20	25	23	18	19	23	26	15	20	25	35	25	21	32	24.1
Farmers	Maximum	50	45	40	40	41	60	59	49	61	53	47	60	62	35	30	45	41	33	36	32	40	40	48	42	46	40	41	37	34	41	42	44.6
	Minimum	30	23	23	15	25	32	31	35	47	14	13	28	30	15	10	10	10	17	24	15	17	17	18	27	15	15	30	27	20	29	22	22.1
Harlan	Maximum	58	59	50	[illegible]	45	61	64	55	61	62	61	..	..	..	..	..	..	..	..	..	50	45	49	41	47	50	47	38	37	48	61	i51.8
	Minimum	25	28	33	33	31	31	51	42	46	22	19	..	..	..	..	..	..	..	..	..	26	31	28	29	18	20	20	30	31	27	25	i29.4
Maysville	Maximum	43	42	32	37	37	51	51	46	53	47	44	60	62	39	30	38	38	26	27	35	37	39	43	35	33	40	40	38	33	41	58	41.1
	Minimum	26	30	20	19	28	33	38	33	41	12	16	34	38	12	12	12	23	16	22	12	17	18	22	28	12	23	21	28	22	30	27	23.4
Middlesboro	Maximum	55	57	52	47	49	60	61	58	62	61	50	54	57	56	35	39	43	48	50	41	44	43	48	42	42	47	47	41	49	50	56	50.2
	Minimum	22	24	34	32	40	36	54	42	44	20	18	41	51	29	11	16	29	32	34	32	24	26	25	26	16	19	29	32	26	24	25	29.1
Mount Sterling	Maximum	45	47	39	39	35	57	59	49	60	41	45	60	62	50	36	37	35	30	30	33	31	37	44	37	35	38	38	34	29	38	58	42.2
	Minimum	22	30	24	18	32	32	36	33	41	12	15	40	26	10	8	14	19	18	22	16	16	21	21	26	17	23	31	25	20	27	27	23.2
Richmond	Maximum	56	55	44	39	38	60	42	49	60	41	51	60	62	32	30	39	38	32	33	33	38	28	47	41	39	40	41	37	32	43	63	43.7
	Minimum	26	35	24	19	34	35	36	35	44	12	16	40	32	12	10	19	30	20	26	19	20	22	23	29	19	28	31	29	21	30	36	26.2
Weeksbury	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Williamsburg	Maximum	56	60	55	49	49	60	58	56	63	61	53	62	62	50	45	45	43	56	53	45	46	42	43	42	36	56	51	48	37	53	65	51.7
	Minimum	26	28	32	29	39	40	41	49	50	18	18	46	50	18	12	20	33	31	33	30	25	32	29	27	29	22	32	35	26	34	28	31.1

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
Based on 700 records
0.5
1
2
4
6
8

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CLIMATOLOGICAL DATA

KENTUCKY SECTION

ANNUAL, 1919.

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE

Climatological Data for the Year 1919.

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number of days				Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall, unmelted.	With precip. of .01 in. or more.	Clear.	Pt. Cloudy.	Cloudy.	
WESTERN DIVISION.																				
Beaver Dam	Ohio	441	17	58.9	100	July 13†	5	Jan. 4	17	43.42	8.05	Nov.	0.80	July	......	91	222	89	54	w.
Blandville	Ballard	445	38	58.5	96	Aug. 6	1	Jan. 4	41	53.41	9.47	Oct.	1.36	July	3.0	112	124	117	124	sw.
Calhoun	McLean	437	16	58.7	101	July 29†	5	Jan. 4	17	50.96	7.93	Mar.	0.75	Sep.	1.0	108	120^{a}	152^{a}	92^{a}	sw.
Earlington	Hopkins	420	29	60.2	104	July 29	7	Jan. 4	30	48.39	10.39	Nov.	0.56	Sep.	1.0	110	223	9	133	s.
Greenville	Muhlenburg	519	3	58.9	103	July 25	4	Jan. 4	3	53.86	10.21	Nov.	1.32	Sep.	......	......	212^{l}	90^{l}	51^{l}	w.
Henderson	Henderson	327	......	......	......	......	......	......	12	42.34	7.59	Oct.	0.17	July	0.5	90	......	......	......	......
Hopkinsville	Christian	524	23	59.9	100	July 3†	3	Jan. 4	23	66.42	10.47	Oct.	1.87	Sep.	0.7	110	139	102	124	s.
Marion	Crittenden	571	21	58.6	99	Aug. 6	−1	Jan. 4	19	48.76	7.64	Nov.	0.86	Sep.	2.0	74	160	112	93	w.
Mayfield	Graves	364	10	58.0	98	July 21†	3	Jan. 4	10	49.77	7.91	Nov.	0.84	Sep.	1.0	87	105^{h}	137^{h}	115^{h}	s.
Owensboro	Daviess	479	23	57.8	97	July 29	6	Jan. 4	23	48.16	7.85	Oct.	0.92	Sep.	T.	105	163	78	124	s.
Paducah (Lone Oak)	McCracken	516	3	59.5	101	July 13	3	Jan. 4	3	58.74	9.43	Oct.	1.53	Feb.	1.1	114	215	28	122	s.
Paducah	McCracken	341	......	......	......	......	......	......	31	54.61	8.50	Nov.	0.84	July	......	......	......	......	......	......
Princeton	Caldwell	529	10	58.3	100	July 29	4	Jan. 4	10	58.29	9.15	Nov.	1.10	Sep.	......	......	......	......	......	......
CENTRAL DIVISION.																				
Alpha	Clinton	811	26	......	......	......	7	Jan. 4	26	......	7.10	Jan.	......	......	......	......	......	......	......	......
Anchorage	Jefferson	700	19	55.8	97	July 3†	3	Jan. 4	19	50.69	7.24	Oct.	1.04	Feb.	2.8	102	210	58	97	sw.
Bardstown	Nelson	637	23	57.9	98	July 13†	1	Jan. 4	23	61.22	12.46	Oct.	1.25	July	......	106	250	34	81	e.
Bowling Green	Warren	500	29	60.5	104	Aug. 6	6	Jan. 4	30	58.70	9.61	Mar.	1.36	July	1.0	98	175	98	92	w.
Brownsville	Edmonson	410	......	......	......	......	......	......	2	65.81	10.63	Nov.	2.04	Sep.	1.1	132	......	......	......	......
Burnside	Pulaski	773	......	......	......	......	......	......	27	56.88	9.71	Oct.	1.90	Sep.	4.0	93	......	......	......	......
Carrollton	Carroll	492	......	......	......	......	......	......	21	43.60	7.12	Oct.	0.87	Feb	......	110	......	......	......	......
Cloverport	Breckenridge	375	......	......	......	......	......	......	6	49.47	7.02	Nov.	0.86	Sep.	0.3	118	......	......	......	......
Eubank	Pulaski	1,177	25	57.1	95	July 14	2	Jan. 4	25	58.91	8.44	Oct.	1.48	April	8.0	90	104^{d}	113^{d}	144^{d}	s.
Frankfort	Franklin	560	27	57.8	97	July 14	6	Jan. 4	30	51.08	9.14	Oct.	1.21	Feb.	0.2	112	171	60	134	s.
Franklin	Simpson	691	23	60.3	102	July 14	7	Jan. 4	23	64.78	11.62	May	1.48	June	2.5	103	171	88	106	s.
Greensburg	Green	581	27	57.4	97	July 13†	1	Jan. 4	31	50.31	7.72	May	0.91	July	1.5	115	94^{a}	50^{a}	220^{a}	se.
High Bridge	Jessamine	762	......	......	......	......	......	......	17	56.90	9.15	Oct.	1.23	Sep.	2.0	119	......	......	......	......
Irvington	Breckinridge	646	22	57.7	95	July 13†	6	Jan. 4	22	52.39	7.37	June‡	1.04	Feb.	0.2	80	198	42	125	sw.
Junction City	Boyle	985	26	57.3	97	Sept. 10	5	Jan. 4	26	52.45	7.26	Nov.	1.75	Sep.	9.7	139	168	101	96	sw.
Leitchfield	Grayson	635	24	57.4	97	July 12†	4	Jan. 4	24	58.34	11.04	May	0.82	Sep.	2.5	97	174	96	95	sw.
Lexington	Fayette	989	32	56.3	94	July 14	3	Jan. 3	32	51.12	8.50	Nov.	1.12	Sep.	5.3	132	134	87	144	sw.
Loretto	Marion	681	19	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
LOUISVILLE	Jefferson	525	47	57.8	97	July 13	6	Jan. 3	47	46.06	6.89	Oct.	0.99	Feb.	3.1	110	161	88	116	s.
Do (Cherokee Park)	Jefferson	534	10	......	......	......	4	Jan. 4	10	51.69	6.63	Nov.	1.28	Feb.	2.8	101	173	82	110	s.
St. John	Hardin	777	23	57.4	100	Sept. 10	6	Jan. 4	23	58.90	10.62	Oct.	0.66	July	3.4	105	224	40	101	......
Scott	Kenton	900	22	55.5	97	July 3†	2	Jan. 4	22	48.10	11.13	Oct.	1.46	Feb.	3.5	118	114	136	115	s.
Shelbyville	Shelby	825	31	56.0	100	July 30	3	Jan. 4	31	54.18	8.95	Oct.	1.42	July	1.8	111	173	79	113	s.
Taylorsville	Spencer	489	17	56.0	97	July 13	6	Jan. 4	17	57.50	10.33	Oct.	1.37	Feb.	1.6	118	171	52	142	sw.
Williamstown	Grant	943	17	57.5	99	Sept. 9	3	Jan. 4	17	39.60	6.29	Nov.	1.13	Feb.	4.2	119	114	162	89	......
Woodbury	Butler	533	......	......	......	......	......	......	2	58.48	8.21	Nov.	1.39	Sep.	T.	106	......	......	......	......
EASTERN DIVISION.																				
Beattyville	Lee	650	16	57.8	100	July 14†	1	Jan. 5	17	51.12	8.85	Oct.	1.53	Feb.	3.2	116	122	100	143	w.
Berea	Madison	1,070	17	......	97	July 14†	......	......	17	......	6.90	May	1.13	Sep	......	......	......	......	......	......
Catlettsburg	Boyd	534	......	......	......	......	......	......	31	45.09	6.90	May§	0.98	Feb.	6.4	122	......	......	......	......
Cynthiana	Harrison	684	......	......	......	......	......	......	2	52.17	8.90	Oct.	1.30	Feb.	......	89	......	......	......	......
Falmouth	Pendleton	600	......	......	......	......	......	......	31	45.46	6.87	Nov.	1.22	Aug.	......	106	169	69	127	e.
Farmers	Rowan	668	12	56.6	99	July 15	4	Jan. 4	13	......	9.30	Nov.	1.30	Sep.	......	......	182	122	61	w.
Harlan	Harlan	1,197	2	......	96	July 4†	......	......	2	......	8.69	Oct.	......	......	......	......	......	......	......	......
Jackson	Breathitt	776	......	......	......	......	......	......	8	46.49	7.04	Oct.	0.20	July	5.0	80	......	......	......	......
London	Laurel	1190	......	......	......	......	......	......	5	51.48	9.71	Oct.	1.40	Sep.	10.7	103	......	......	......	......
Louisa	Lawrence	584	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Maysville	Mason	524	22	57.5	102	Aug. 5	6	Jan. 4	22	40.79	8.11	Nov.	0.84	Aug.	......	111	179	94	92	n.
Middlesboro	Bell	1,128	21	......	96	July 13†	......	......	21	......	10.01	Oct.	......	......	......	......	......	......	......	......
Mount Sterling	Montgomery	930	30	......	99	July 16	4	Jan. 4†	30	......	......	......	2.12	Sep.	......	......	......	......	......	......
Pikeville	Pike	634	......	......	......	......	......	......	13	50.97	9.34	Oct.	1.84	Feb.	6.0	107	......	......	......	......
Richmond	Madison	926	24	58.1	97	July 14	4	Jan. 4	27	......	7.53	Nov.	0.40	July	4.9	......	192	44	127	......
Weeksbury	Floyd	1,216	4	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Williamsburg	Whitley	939	22	59.1	98	July 14†	3	Jan. 4	24	49.58	10.12	Oct.	1.10	Sep.	10.2	96	150	76	139	s.

All temperature data are taken from self-registering thermometers.
Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents 2 days, etc.
†Also on other dates.

‡ Also in October.
§ Also in December.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXIV. Louisville, Ky., Annual, 1919. No. 13

GENERAL SUMMARY.

The average temperature for the State for the year 1919 was considerably above normal, in fact it was one of the warmest years since State averages were established in 1889. Temperatures averaged below normal in only three months, May, August, and December; while January, February, June, July, and October were abnormally warm. Except in 1890 and 1898, precipitation was the heaviest on record. It was not well distributed throughout the year, a serious deficiency occurring during the growing season from June to September, inclusive, and a large excess in May, and in the period of fall planting and corn harvest, October-December. The principal features of the weather were the mildness of the winter months, the disastrous freeze in April, the wet May, the deficient and irregularly distributed rainfall of the summer months, and the wet weather of October and November. Weather conditions from January to March, inclusive, were unusually favorable for the growth of winter grains and for outdoor work; but the wet weather of May seriously interfered with the preparation of soil and the planting of crops, delaying much of this work until June and causing a large part of the staple crops to be planted late. The freeze during the last week in April, when minimum temperatures registered from 22° to 35° over the State, was probably the most damaging spring frost since 1895. Very little fruit survived this freeze; and wheat also suffered considerable damage on account of its advanced condition. June and July were much warmer than usual. In June the excess heat was generally beneficial, overcoming to some extent the effect of the wet May; but in July drought became severe and the intense heat caused premature ripening and damage by "firing" to early corn and tobacco. The August rains, which are usually relied on to break these summer droughts, were local in character this year and missed large districts. In such localities the shortage of water for stock became serious. The drought was broken only in limited areas, continuing over much of the State until late in September. October was exceptionally mild and wet, rain occurring almost daily after the 9th. Late crops had ample time in which to mature, but the work of saving them was seriously hindered by the continuous wet weather. Preparation of soil and sowing of grain were also delayed, much of this work being performed at a great disadvantage late in November. The first killing frost occurred November 5th, a remarkably late date for this section. The wet weather continued throughout November and December, causing much corn to spoil in the fields. Heavy losses, especially in corn, were caused by flooding of lowlands along the main streams of the State and the Ohio during December.

THE WEATHER BY MONTHS.

January.—The month was decidedly warm, with conditions generally favorable for winter grains, although there was practically no snow covering. Temperatures were remarkably uniform, and the light freezes were scarcely more than sufficient to keep the plants in dormant condition. Precipitation was light, and the soil drained out so well that it could be worked in most farming districts. Considerable plowing and some seeding were accomplished.

February.—Temperature and precipitation conditions were similar to those prevailing in January. The fine weather permitted outdoor work during most of the month, and unusual progress was made with plowing and seeding.

March.—Cool nights and heavy frosts held vegetation in check to some extent, especially fruit buds, which showed a tendency to develop prematurely. Heavy rains over the principal farming districts interfered seriously with plowing; but precipitation was comparatively light over eastern counties. Pastures were ready for grazing at the end of the month in the southern and western counties.

April.—Favorable weather prevailed during the first three weeks, causing vegetation to make good growth. During the last week freezing temperatures and killing frosts occurred generally over the State, except in a few of the extreme western counties, causing great damage to fruit, and injuring to some extent wheat, clover and alfalfa. The exceptionally heavy damage from these frosts was due in large measure to the advanced condition of vegetation; but temperatures were also extremely low, ranging from 3° to 10° below freezing in the central and eastern counties. Rainfall was near normal in amount and well distributed through the month, interfering but little with farm work.

May.—Low temperature and excessive precipitation caused exceptionally unfavorable conditions for germination of seed and for growth of most crops. The soil was too wet to be worked during most of the month, corn could not be planted, weeds took possession of many fields; while corn and tobacco land yet unbroken, amounting to nearly half the area to be planted in many localities, could not be prepared. On account of the excessive moisture wheat grew rank and rust appeared in some places. Transplanting of tobacco was possible nearly every day for two weeks; but other farming operations remained at a standstill until near the end of the month, when a change to more favorable weather occurred.

June.—The month was unusually warm and generally quite favorable for growth and cultivation of crops. In spite of the favorable conditions however, farm work had been so delayed by the wet weather of the previous month that many fields could not be cleared of weeds and had to be abandoned. Preparation of soil, planting and cultivation were so crowded together that much work could not be carried out, the corn crop being especially curtailed on this account. The high temperature and advanced condition of grain hastened wheat harvest, which became general in southern and western counties by the 15th.

July.—Hot, dry weather prevailed, being generally favorable for threshing, hay harvest, and cultivation of crops; but precipitation was not sufficient to keep vegetation in good growing condition. Rainfall was badly distributed, many localities suffering severely from drought. Tobacco, and early corn on uplands, began to deteriorate or "fire" toward the end of the month. Growth was checked and crops developed unevenly from lack of moisture.

August.—Temperature and rainfall averaged near normal, but conditions were generally unfavorable for growth of crops. This was due in part to the character of the rainfall, which occurred usually in the form of heavy downpours with considerable run-off and only moderate penetration. No general rains occurred, and the drought was not broken in the northern and central counties. In these drought-stricken districts corn and tobacco ripened prematurely. Cutting and housing of tobacco began about two weeks earlier than usual, and corn cutting also began unusually early.

September.—High temperature and drought characterized the weather for the first three weeks. All late crops deteriorated, while the shortage of stock water became serious in many places. The dry weather was favorable for saving and curing of tobacco; but interfered seriously with the preparation of soil for fall seeding. The drought was broken in most districts by the rains of the 19th-22d, but only the latest corn and tobacco were benefited.

Highest Monthly Temperatures for the Year 1919, with Dates.

Stations.	January.		February.		March.		April.		May.		June		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
WESTERN DIVISION.																								
Beaver Dam	67	20	64	1†	79	25	85	23	92	29	95	12†	100	13†	99	7	100	10	96	1	74	9	62	7
Blandville	63	20	61	1	71	4	83	23	84	29	91	16†	95	21†	96	6	93	10	89	2	66	9†	64	31
Calhoun	68	19	62[a]	13	79	25	84	22	93	30	93[a]	12†	101	29	100	5†	101	10	96	1	70	9	63	31
Earlington	68	19†	64	13	80	25	89	23	95	29	103	17	104	29	102	6	102	10	98	1	71	9†	65	31
Greenville	65	19†	65	13	79	25	85	23	90	29	93	15†	103	25	98[b]	6	99	10[a]	94	1	70	9†	65[e]	7
Hopkinsville	66	21	64	13	79	25	86	8†	91	29	97	16†	100	3†	99	6	98	10	95	1	72	1	65	31
Marion	64	30	60	13	73	25	80	6†	87	29	93	16†	98	24†	99	6	95	9†	92	1	78	9	62	6†
Mayfield	62	19†	61	1	71[c]	20†	83[a]	23	86b	29	91	16†	98	21†	98	4	95	10	91a	1	67	23	63[d]	7
Owensboro	63	20	63	13	76	25	82	23	88	29	94	16	97	29	94	5†	96	10	92	1	74	1	61	6
Paducah (Lone Oak)	66	20	60	1	70	4†	85	22†	90	30	96	22	101	13†	100	6	98	10	94	3	77	1	56	6†
Princeton	64	20†	61	13†	78a	25	85	22	90a	29	96[b]	17	100[b]	29	97a	2†	98[b]	10	92[j]	2	67[g]	10	61[d]	6
Russellville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94	12	88	2	68[d]	9	64	6
CENTRAL DIVISION.																								
Alpha	64	21	65	22	75	25	83	9	85	30	88	16	.....	.....	92	6	93	10	85	1	69	1†	66	9
Anchorage	65	22	66	13	77	25	84	9	90	30†	93	16	97	3†	96	6	97	10	93	2	72	9	60	7†
Bardstown	68	22	68	13	74	25	86	9	90	30†	93	21	98	13	96	5	98	10	95	3	73	9	62	31
Bowling Green	66	20	65	13	79	25	88	14	93	30†	97	12†	103	13†	104	6	100	10	93	2	74	2	68	31
Eubank	64	21	68[b]	22	76[a]	25	85	9	88	30†	90	2†	95	14	91	6	94	10	89a	1	71	1	62	9
Frankfort	64	22	67	13	74	25	84	9†	91	31	93	11	97	14	96	5	94	9†	90	2	70	9	62	13
Franklin	66	21†	65	13	78	25	85	14†	90	29	95	22	102	14	101	6	98	9†	94	2	69	1†	65	6†
Greensburg	66	19	67	14	78	25	87	8	88	29	93	17	97	13†	93	15	94	8†	91	2	71	9	62a	6†
Irvington	63	22	64	13	75	25	82	9†	89	30†	91	12†	95	13†	93	5	94	10	90	1†	70	9	62	7
Junction City	65	23	66	22	75	16†	82	14†	90	30	93	21	96	14	93	6†	97	10	91	1	71	9†	62	7†
Leitchfield	62	19†	64	13	75	25	81	23	89	29†	91	16†	97	12†	94	6	95	10	90	1†	70	9	62	31
Lexington	63	22	64	13	73	25	84	9	90	30	93	11	94	14	91	6	92	10	89	2	69	9	60	6
LOUISVILLE	63	22	65	13	75	25	84	9	90	30	92	16	97	13	94	6	95	10	91	1†	70	9	61	6
Do (Cherokee Park)	64	22	65	13	70	4†	79	9	89	29	.....	.....	.....	.....	91	5	92	10	88	2	70	9	59	7
St. John	62	22†	64	13	76	25	85	23	89	29	92	12	99	29	97	5	100	10	93	2	70	9	62	7
Scott	62	22	64	13	73	25	82	9	90	29	92	2†	97	3	95	15	97	9†	92	2	67	9	59	13
Shelbyville	65	22	66	13	70	4†	84	9	92	30	94	11	100	30	99	6	95	10	88	1	73	9†	57	13
Taylorsville	63	22	66	13	75	25	84	9	90	30	92	20	97	13	94	5	96	10	89	2†	70	9	62	7
Williamstown	65	22	65	22	77	25	88	23	90	30†	93	12	98	2	98	6†	99	9	95	1	72	9	59	3
EASTERN DIVISION.																								
Beattyville	65	20†	67	13	81	25	86	9	90	29†	95	19†	100	14†	96	4†	99	10	95	2	78	9	65[f]	31
Berea	.....	.....	.....	.....	76	25	87	9	90	29†	94	13†	97	14†	94	4†	95	20	94a	3	75	9	62	6†
Farmers	65	22	67	23	70	21†	87	9	92	31	95	14	99	15	96	4†	97	10	94	1†	75	1	62	13†
Harlan	.....	.....	64[f]	28	76[c]	24†	87[c]	9	90	30†	92[i]	1†	96	4†	92[a]	6	.....	.....	.....	.....	72[h]	1†	64[i]	7
Maysville	59	22†	68	13	72	25	84	9	95	31	96	11†	101	14	102	5	100	8†	95	1†	70	9	62	13
Middlesboro	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93	17	96	13†	95	7	94	9	92	2	74	1	61	7
Mount Sterling	64	20†	69	22	77	25	86	9	91	30	94	1†	99	16	94	7	96	10	92	2	.....	.....	62	13
Richmond	67	22	64	13	77	25	88	9	92	30	93	11	97	14	93	4†	96	10	93	1	75	9	63	31
Weeksbury	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williamsburg	65	19†	68	22	75	15	88	9	91	31	93	21†	98	14	95	7	95	10	92a	1	71	10	65	31

† Also on other dates.

OCTOBER.—This was the warmest and wettest October on record in this State. The rains set in on the 9th and the soil soon became water-soaked, continuing in that condition until the end of the month. Preparation of soil and fall seeding practically ceased with the beginning of the rains, while previous to that time the soil had been generally too dry. The maturity of late crops was delayed and the work of saving them was rendered unusually difficult. Corn sprouted and rotted badly in the shock, and much that was uncut fell over and was damaged. Flooding of lowlands along headwater streams caused considerable loss of crops in the field. No frost of consequence occurred.

NOVEMBER.—Except for 10 days of fair weather near the middle of the month, wet weather was the rule. During this intermission some wheat was sown, but much of it failed to germinate. Lowlands were again flooded and crops washed away throughout the farming districts. Some progress was made in gathering corn, but a large part of the crop remained in the field and continued to deteriorate from molding and sprouting.

DECEMBER.—The month was cold, wet and generally unfavorable. Heavy rains caused floods in headwater streams, attended by loss of crops in creek and river bottoms. Hard freezing of saturated soil injured wheat to a considerable extent. Snowfall was light and afforded no protection of consequence. This was the third month in succession with rainfall largely in excess—a period remarkable for the persistence of weather conditions unfavorable for fall work.

Lowest Monthly Temperatures for the Year 1919, with Dates.

Stations.	January		February		March.		April.		May.		June.		July.		August.		September		October.		November.		December	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
WESTERN DIVISION.																								
Beaver Dam	5	4	18	9†	18	1	25	1†	41	12	57	29	56	17	49	26	41	24	41	20	18	14	9	10
Blandville	1	4	16	9	17	1	27	1	47	2†	58	5†	60	17	58	26	49	21	40	18	22	13	7	10
Calhoun	5	4	17	26	16	1	24	1	43	21	57	5	57	17	53	3†	45	24	40	18	19	14	7^{b}	10
Earlington	7	4	18	9	18	1	27	2	43	2	58	5†	55	17	52	26	45	24	36	18	19	11	9	10
Greenville	4	4	17	26	16	1	25	1†	43	2	57	6	57	17	51^{b}	26	44	24a	39	18	18	14	8^{a}	10
Hopkinsville	3	4	18	26	18	1	25	2	41	2	57	6	58	17	52	26	45	24	39	18	19	14	8	10
Marion	−1	4	15	9	17	2	25	1	45	12†	59	6	58	17	56	26	48	26	38	18	22	13	7	10†
Mayfield	3	4	17	9	19a	1	33^{i}	26	45^{b}	2	57	5†	56	17	53	26	48	24	37a	18	21	14	9^{a}	10†
Owensboro	6	4	19	26	18	1	26	1	44	2†	58	6†	61	16	54	26	46	24	41	19	22	14	7	10†
Paducah	3	4	12	9	18	1	28	1	45	23	57	5	57	17	56	25	50	21	39	18	22	14	3	10
Princeton	4^{b}	4	18^{c}	9†	17a	1	25	2	41a	2	55^{b}	6	59^{b}	17	50^{c}	26	44^{b}	24	41^{i}	20	19^{g}	14	9^{i}	14
Russellville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46	24	39	18	18	14	7	15
CENTRAL DIVISION.																								
Alpha	7	4	18	6	23	1	27	2	42	12	60	4†	.....	.....	50	20	45	24	47	18	21	14	15	15
Anchorage	3	4	14	6	16	1	21	2	38	18	55	29	58	17†	47	28	43	2†	36	19	16	14	6	10
Bardstown	1	4	16	6	18	1	25	1†	41	12	59	6	60	17†	51	10†	45	1†	39	19	19	14	9	14
Bowling Green	6	4	20	10†	20	1	27	1	44	12	60	6	59	17	56	3†	49	2†	40	18	20	14	11	10†
Eubank	2	4	15^{b}	6	18^{h}	1	22	2	38	12	57	6	57	2†	48	28	42	24	42a	18	17	14	8	15
Frankfort	6	4	18	6	20	1	26	1	40	12	60	9†	59	17	52	28	45	27	40	19	22	14	11	10†
Franklin	7	4	19	26	18	1	25	1	42	18	60	6	58	17	54	26	47	24	40	20	19	14	10	14†
Greensburg	1	4	17	6	17	1	24	1†	39	12	55	29	54	17	49	26	42	2†	37	18	17	14	8a	14
Irvington	6	4	18	26	16	1	25	1	42	13	59	29	59	1	55	26†	46	24	41	18	21	14	7	10
Junction City	5	4	16	6	16	1	24	1†	37	12	54	29	50	1	50	26	41	12	37	18	16	14	10	14†
Leitchfield	4	4	15	10	17	1	24	1	43	12	58	29	60	17†	52	26	44	24	41	18	19	14	8	10
Lexington	3	3	17	26	19	1	24	1	43	13	59	29	61	17	58	9	49	26	42	18	21	13	9	10
LOUISVILLE	6	3	19	26	19	1	25	1	45	21	58	29	62	16	60	11	49	26	43	18	22	13	8	10
Do (Cherokee Park)	4	4	17	26	16	1	23	1	39	12	58	29	59	17	54	28	46	26	40	18	22	13†	8	10
St. John	6	4	18	26	25	1†	24	1	35	12	57	29	57	17	50	20	42	24	40	18	19	15†	8^{a}	10
Scott	2	4	16	5†	17	1	24	1†	39	12	54	29	56	11	50	28	41	27	38	19†	20	13†	7	10
Shelbyville	3	4	15	26	16	1	23	1†	36	12	54	29	54	11	48	26†	44	2†	36	18	17	14	6	10
Taylorsville	6	4	17	6	18	1	25	1†	39	12	55	29	57	17†	48	26	40	27	36	19	19	14	9	10
Williamstown	3	4	17	6†	18	1	24	1†	40	12	56	29	55	11	54	26†	46	26	41a	29	20	13	8	10
EASTERN DIVISION.																								
Beattyville	1	5	12	6	21	2†	19	1†	37	12	51	29	53	1	50	27†	42	27	40	18	18	20	9	15
Berea	.....	.....	.....	.....	20	1	24	1†	35	12	59	29	60	3†	48	27	43	2†	42a	18	18	14	8	15
Farmers	4	4	12	6	21	12†	19	1†	36	12	52	30	53	17	50	28†	43	24	35	18†	20	14†	10	15†
Harlan	.....	.....	23^{f}	27	26^{c}	12	24c	2	41	2	55^{i}	7	52	1	51a	27	.....	.....	.....	.....	22^{h}	14	18^{i}	25
Maysville	6	4	16	6†	21	1†	22	2	39	12	55	30	55	11	51	26	43	13	41	18	22	14	12	14†
Middlesboro	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53	7	53	1	51	27	45	27	42	8	19	14†	11	15
Mount Sterling	4	4†	17	8	20	1	24	1	36	12	57	9	57	2	47	28	45	2†	38	18	.....	.....	8	15
Richmond	4	4	17	26	18	1	21	1	38	12	56	29	58	17	53	26	48	3	40	18	22	14	10	15
Weeksbury	0	5	15	10	.....	.....	.....	.....	.....	.....	55^{o}	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Williamsburg	3	4	15	10	24	1	24	2	39	12	53	8	58	1†	50	26	41	13	40	17	20	14	12	15

† Also on other dates.

COMPARATIVE ANNUAL DATA FOR KENTUCKY.

Year.	Temperature.				Precipitation.	
	Mean.	*Departure	Highest.	Lowest.	Average.	*Departure
1889	55.6	−0.7	101	3	35.97	− 9.16
1890	57.1	+0.8	101	4	58.82	+13.69
1891	56.3	0.0	105	0	49.69	+ 4.56
1892	55.3	−1.0	101	− 6	44.25	− 0.88
1893	55.5	−0.8	101	−22	44.71	− 0.42
1894	57.1	+0.8	105	−12	34.81	−10.32
1895	55.0	−1.3	104	−18	38.47	− 6.66
1896	57.6	+1.3	106	−12	44.68	− 0.45
1897	57.2	+0.9	107	−16	46.72	+ 1.59
1898	57.2	+0.9	103	−12	52.38	+ 7.25
1899	56.4	+0.1	105	−33	46.38	+ 1.25
1900	57.7	+1.4	104	− 9	44.40	− 0.73
1901	55.3	−1.0	112	−22	35.65	− 9.48
1902	56.5	+0.2	107	− 3	44.35	− 0.78
1903	55.8	−0.5	104	−16	41.16	− 3.97
1904	55.3	−1.0	100	− 9	35.10	−10.03
1905	55.8	−0.5	106	−16	47.68	+ 2.55
1906	57.0	+0.7	100	−12	48.84	+ 3.71
1907	56.1	−0.2	102	−11	47.76	+ 2.63
1908	57.7	+1.4	104	2	41.94	− 3.19
1909	56.5	+0.2	104	−14	51.36	+ 6.23
1910	55.3	−1.0	100	−20	50.67	+ 5.54
1911	58.0	+1.7	106	−16	46.77	+ 1.64
1912	54.6	−1.7	100	−20	47.93	+ 2.80
1913	57.9	+1.6	109	− 2	47.46	+ 2.33
1914	56.3	0.0	109	−16	41.80	− 3.33
1915	56.2	−0.1	102	0	51.92	+ 6.79
1916	56.2	−0.1	102	−14	45.49	+ 0.36
1917	53.5	−2.8	100	−21	46.01	+ 0.88
1918	56.5	+0.2	111	−20	40.64	− 4.49
1919	57.9	+1.6	104	− 1	52.13	+ 7.00

*Compared with 30 years' normal.

KILLING FROSTS, 1919.

STATIONS.	Last in Spring.	First in Autumn.	STATIONS.	Last in Spring.	First in Autumn
WESTERN DIVISON					
Beaver Dam	April 26	Nov. 5	Irvington	April 26	Nov. 5
Blandville	do 1	do 5	Junction City	do 27	do 5
Calhoun	do 26	do 5	Leitchfield	do 26	do 5
Earlington	do 26	do 5	Lexington	do 26	do 5
Greenville	do 26	do 5	Loretto	....	do 5
Hopkinsville	do 26	do 5	Louisville	do 26	do 5
Marion	do 26	do 5	Cherokee Park	do 26	do 5
Mayfield	do 1	do 5	St. John	do 26	do 5
Owensboro	do 26	do 5	Scott	do 27	do 5
Paducah	do 2	do 5	Shelbyville	do 26	do 5
Princeton	do 26	do 5	Taylorsville	do 27	do 5
Russellville	do 26	do 5	Williamstown	do 26	do 5
CENTRAL DIVISON			EASTERN DIVISON		
Alpha	April 26	do 5	Beattyville	April 27	Nov. 5
Anchorage	do 27	do 5	Berea	do 27	do 5
Bardstown	do 27	do 5	Farmers	do 27	do 5
Bowling Green	do 26	do 5	Maysville	do 27	do 5
Edmonton	....	....	Middlesboro	do 27	do 5
Eubank	do 27	do 5	Mount Sterling	do 27	do 5
Frankfort	do 26	do 5	Richmond	do 26	do 5
Franklin	do 26	do 5	Weeksbury	....	....
Greensburg	do 27	do 5	Williamsburg	do 27	do 5

Monthly and Annual Precipitation for the Year 1919, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
WESTERN DIVISION.																										
Beaver Dam	2.83	−1.63	1.75	−1.63	4.72	+0.81	3.40	−0.71	5.44	+1.66	2.71	−0.72	0.80	−3.59	2.59	−0.75	1.00	−1.52	7.98	+5.54	8.05	+5.19	2.15	−1.80	43.42	+ 0.85
Blandville	1.68	−2.95	1.74	−2.79	8.02	+3.39	4.42	−0.11	4.20	−0.04	4.79	+0.43	1.36	−2.53	4.32	+1.18	2.13	−1.02	9.47	+6.47	7.44	+3.37	3.84	−0.09	53.41	+ 5.31
Calhoun	2.40	−2.69	1.62	−1.78	7.93	+3.96	5.55	+1.07	6.39	+2.78	2.68	−0.95	1.07	−3.52	2.78	−0.58	0.75	−1.85	7.87	+4.59	7.60	+4.49	4.32	+0.15	50.96	+ 5.67
Earlington	2.39	−1.74	2.32	−1.28	8.16	+3.28	3.80	−0.52	5.60	+0.59	2.40	−1.03	0.65	−3.45	2.87	−0.28	0.56	−2.13	5.79	+3.22	10.39	+6.65	3.46	−0.35	48.39	+ 2.96
Greenville	2.80	......	1.62	......	7.80	......	4.65	......	5.62	......	2.58	......	1.75	......	3.38	......	1.32	......	9.08	......	10.21	......	3.05	......	53.86	......
Henderson	1.98	−1.75	1.98	−0.77	6.10	+1.32	3.25	−0.18	5.13	+1.27	3.28	−0.95	0.17	−3.59	2.59	+0.29	1.16	−1.39	7.59	+4.49	5.91	+2.17	3.20	−0.81	42.34	+ 0.10
Hopkinsville	4.22	−0.91	2.42	−1.47	7.89	+3.05	4.78	+0.43	9.72	+5.49	2.89	−1.39	3.38	−0.65	6.22	+3.17	1.87	−1.16	10.47	+7.60	9.03	+4.88	3.53	−1.24	66.42	+17.80
Marion	2.07	−2.73	1.55	−1.82	7.60	+2.81	3.40	−1.18	5.35	+1.06	2.62	−1.03	0.97	−2.96	4.45	+1.66	0.86	−2.18	7.53	+4.99	7.64	+3.92	4.72	+0.50	48.76	+ 3.04
Mayfield	4.13	......	2.20	−1.63	5.67	+1.61	3.64	−0.50	6.09	+1.74	3.65	+1.05	0.84	−3.81	4.94	+1.70	1.77	−1.06	5.50	+2.95	7.91	+3.71	3.43	−0.93	49.77	......
Owensboro	1.70	−2.81	1.26	−1.99	6.30	+1.52	3.22	−0.88	4.74	+0.90	6.20	+2.63	1.73	−2.12	3.15	−0.44	0.92	−1.90	7.85	+4.75	6.14	+2.69	4.95	+1.06	48.16	+ 3.44
Paducah (Lone Oak)	2.84	−1.93	1.53	−2.07	8.61	+4.18	4.47	+0.10	5.02	+1.17	5.34	+0.87	1.77	−2.27	6.98	+3.73	1.72	−1.25	9.43	+6.70	6.72	+2.94	4.31	+0.53	58.74	+12.70
Princeton	4.15	0.00	2.48	−2.58	7.34	+2.13	4.68	+1.11	7.40	+2.17	2.28	−1.81	3.12	−0.29	5.24	+1.71	1.10	−1.64	8.51	+6.41	9.15	+5.03	2.84	−1.60	58.29	+10.64
Russellville	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	3.13	+0.05	5.56	+3.24	7.98	......	3.50	......	......	......
CENTRAL DIVISION.																										
Alpha	7.10	+2.25	2.22	−2.28	3.95	−2.22	2.97	−2.30	5.88	+2.00	4.60	−0.44	.....	......	3.15	−1.18	2.30	−0.86	6.35	+3.92	3.25	−0.38	2.30	−2.44	......	......
Anchorage	2.28	−1.38	1.04	−2.10	6.78	+2.80	3.95	−0.03	5.25	+1.52	3.94	+0.29	2.18	−2.32	3.92	+0.34	2.09	−0.72	7.24	+4.38	6.05	+3.08	5.97	+1.97	50.69	+ 7.83
Bardstown	3.56	−1.27	1.79	−2.12	6.75	+2.06	3.78	−0.09	7.02	+3.49	5.05	+0.71	1.25	−3.23	3.85	+0.24	1.28	−1.62	12.46	*	8.14	+4.76	6.29	+1.93	61.23	+14.92
Bowling Green	3.18	−1.46	2.93	−1.74	9.61	+4.69	4.38	+0.12	9.31	+5.06	3.36	−0.51	1.36	−3.10	2.81	−0.71	2.89	−0.24	6.96	+4.59	7.17	+3.56	4.74	+0.42	58.70	+19.68
Brownsville	4.30	......	3.14	......	9.59	......	4.26	......	8.53	......	5.29	......	2.59	......	3.18	......	2.04	......	7.65	......	10.63	......	4.61	......	65.81	......
Burnside	7.10	+2.55	2.62	−1.64	4.23	−1.04	3.42	−0.53	4.56	+0.49	2.55	−1.83	3.76	−1.17	3.74	−0.37	1.90	−1.36	9.71	+7.41	7.75	+4.54	5.54	+1.25	56.88	+ 8.30
Carrollton	2.21	−1.43	0.87	−2.01	5.50	+2.17	4.69	+1.51	3.94	−0.10	3.10	−0.49	1.37	−2.03	1.92	−0.90	1.81	−1.02	7.12	+4.47	6.74	+3.81	4.33	+1.33	43.60	+ 5.31
Cloverport	2.56	......	2.57	......	6.19	......	3.34	......	5.84	......	4.34	......	1.60	......	3.63	......	0.86	......	6.28	......	7.07	......	5.19	......	49.47	......
Eubank	5.84	+1.87	1.73	−2.36	3.05	−2.20	1.48	−2.57	8.21	+4.26	4.57	+0.49	3.34	−1.29	6.21	+2.26	2.03	−1.49	8.44	+6.30	7.93	+4.90	6.08	+2.66	58.91	+12.83
Frankfort	2.92	+0.70	1.21	−2.35	5.47	+0.77	3.25	−0.48	4.39	+0.58	4.97	+0.77	2.12	−1.99	1.69	−1.99	1.77	−1.09	9.14	+6.67	7.27	+3.86	6.88	+3.29	51.08	+ 7.34
Franklin	4.32	+0.72	3.03	−1.86	7.75	+3.00	4.12	−0.49	11.62	+7.57	1.48	−2.49	4.67	+0.56	3.46	+0.16	3.65	+0.29	8.99	+6.89	6.01	+2.48	5.68	+1.40	64.78	+18.23
Greensburg	5.99	+1.48	2.13	−1.89	4.71	−0.32	3.11	−0.74	7.72	+3.43	3.23	−1.22	0.91	−3.68	2.66	−1.24	1.33	−1.73	6.37	+3.61	7.23	+3.82	4.92	+0.76	50.31	+ 2.28
High Bridge	5.35	+1.13	1.63	−1.83	4.37	+0.16	3.14	−0.55	6.62	+2.80	2.21	−1.78	2.35	−2.17	4.21	+0.34	1.23	−1.65	9.15	+6.68	9.10	+6.39	7.54	+3.14	56.90	+12.69
Irvington	2.17	−2.28	1.04	−2.29	5.93	+1.33	3.20	−0.82	5.13	+1.72	7.37	+3.38	2.93	−0.62	3.67	+0.07	1.21	−1.78	7.37	+4.62	6.44	+3.23	5.93	+2.03	52.39	+ 8.59
Junction City	4.93	+0.51	2.06	−1.57	3.58	−1.53	3.58	−0.13	5.99	+2.24	2.56	−1.26	3.42	−0.81	4.48	+1.15	1.75	−1.27	6.38	+4.39	7.26	+4.12	6.49	+2.23	52.45	+ 7.27
Leitchfield	2.13	−2.39	1.52	−2.26	5.10	+0.31	5.09	+1.01	11.04	+7.04	2.49	−1.50	1.85	−2.29	2.88	−0.79	0.82	−2.82	10.67	+8.34	9.58	+5.65	5.17	+0.55	58.34	+10.75
Lexington	2.48	−1.35	1.61	−1.62	3.71	−1.01	3.51	+0.17	6.38	+2.86	4.49	+0.50	2.28	−2.16	2.39	−1.18	1.12	−1.30	7.95	+5.73	8.50	+5.02	6.70	+3.38	51.12	+ 9.04
LOUISVILLE	1.63	−2.27	0.99	−2.76	5.72	+1.40	3.15	−0.92	4.22	+0.58	4.41	+0.18	3.47	−0.27	1.57	−1.94	2.53	−0.10	6.89	+4.26	5.59	+1.41	5.89	+2.16	46.06	+ 1.73
Do (Cherokee Park)	2.12	−2.66	1.28	−1.68	6.26	+2.42	4.00	−0.28	4.92	+1.04	6.15	+2.59	2.94	−2.68	2.77	−1.38	2.60	−0.57	5.95	+2.53	6.63	+4.20	6.07	+1.90	51.69	+ 5.43
St. John	3.42	−1.15	1.61	−2.37	7.98	+2.99	4.44	+0.57	7.51	+3.53	5.58	+1.58	0.66	−2.89	2.17	−1.46	0.76	−2.36	10.62	+8.13	8.21	+4.73	5.94	+1.52	58.90	+12.82
Scott	2.29	−1.80	1.46	−1.29	6.41	+1.97	3.42	+0.24	4.66	+0.60	2.78	−0.90	3.16	−0.18	1.55	−1.99	2.14	−0.41	11.13	+8.79	5.15	+2.35	3.95	+0.74	48.10	+ 8.12
Shelbyville	3.02	−1.24	1.52	−2.28	7.56	+2.85	2.37	−1.35	4.89	+0.77	6.31	+1.85	1.42	−2.68	1.97	−1.39	1.72	−1.13	8.95	+6.53	8.83	+5.42	5.62	+1.73	54.18	+ 9.08
Taylorsville	2.86	−1.83	1.37	−2.40	7.46	+3.12	4.09	−0.38	5.83	+2.36	4.19	−0.34	2.88	−1.76	2.63	−1.09	1.39	−1.06	10.33	+7.78	8.04	+4.94	6.43	+2.01	57.50	+10.35
Williamstown	2.35	−1.52	1.13	−1.84	5.70	+1.54	2.50	−0.60	5.04	+1.49	3.28	−0.45	1.43	−2.63	1.71	−2.43	1.78	−1.31	5.80	+2.92	6.29	+3.95	2.59	−1.01	39.60	− 1.89
Woodbury	6.20	......	2.51	......	7.78	......	4.86	......	6.31	......	5.18	......	1.88	......	2.86	......	1.39	......	7.91	......	8.21	....	3.39	......	58.48	.....
EASTERN DIVISION.																										
Beattyville	4.87	+0.21	1.53	−2.57	3.67	−1.66	2.67	−1.60	4.84	+0.69	4.21	−0.50	2.00	−3.03	3.70	−0.93	1.74	−1.31	8.85	+5.69	7.63	+4.88	5.41	+0.74	51.12	+ 0.61
Berea	.....	......	.....	......	2.43	−2.50	2.04	−1.57	6.90	+2.92	3.41	−1.47	2.39	−1.52	5.73	+0.79	1.13	−1.53	6.62	+3.55	6.38	+3.48	6.90	+2.31	......	......
Catlettsburg	3.94	−0.08	0.98	−2.53	2.84	−1.62	2.84	−0.69	6.90	+2.72	3.53	−0.90	1.48	−2.72	3.48	−0.13	1.72	−0.88	5.40	+2.73	6.87	+4.06	5.11	+1.61	45.09	+ 1.54
Cynthiana	2.95	......	1.30	......	4.00	......	3.52	......	4.90	......	4.45	......	3.05	......	2.25	......	2.60	......	8.90	......	8.00	......	6.25	......	52.17	......
Falmouth	2.79	−0.91	1.56	−1.80	5.21	+1.12	2.93	−0.54	3.81	+0.14	5.64	+1.47	4.04	+0.29	1.22	−2.31	2.21	−0.25	4.88	+2.44	6.87	+3.70	4.30	+0.95	45.46	+ 4.30
Farmers	4.84	+1.04	2.16	−1.01	3.33	−1.23	2.82	−1.18	5.21	+1.15	.....	......	.....	......	3.22	−1.60	1.30	−1.64	6.23	+2.90	9.30	+6.57	4.44	+0.69	......	......
Harlan	.....	......	2.38	......	3.53	......	2.44	......	7.19	......	3.80	......	2.55	......	5.95	......	.....	......	8.69	......	5.05	......	4.60	......	......	......
Jackson	5.31	+1.55	1.45	−1.85	3.80	−0.83	2.21	−1.31	5.83	......	2.87	......	0.20	−3.83	2.72	......	2.22	−0.36	7.04	+3.45	6.90	+3.22	5.94	+2.34	46.49	......
London	5.50	......	1.77	......	2.84	......	3.32	......	6.65	......	2.92	......	1.70	......	4.45	......	1.40	......	9.71	......	6.63	......	4.59	......	51.48	......
Louisa	4.08	+0.48	1.65	−2.03	3.38	−0.74	2.84	−0.38	.....	......	.....	......	.....	......	.....	......	2.59	+0.02	5.93	+3.05	6.03	+3.28	5.84	+2.68	......	......
Maysville	2.57	−1.59	1.05	−2.28	2.56	−2.08	2.73	−0.70	5.01	+0.96	2.32	−2.01	1.86	−2.68	0.84	−3.14	1.23	−1.40	6.61	+4.09	8.11	+5.27	5.90	+2.14	40.79	+ 3.42
Middlesboro	.....	......	.....	......	.....	......	.....	......	.....	......	4.09	−0.45	3.16	−2.34	5.68	+2.15	0.72	−2.03	10.01	+7.71	4.07	+0.56	4.02	−0.13	......	......
Mount Sterling	3.94	−0.78	2.48	−1.51	4.03	−1.38	3.58	−0.34	6.93	+2.64	4.59	−0.54	2.88	−2.18	4.67	−0.70	2.12	−0.77	8.61	+5.64	.....	......	7.80	+3.56	......	......
Pikeville	5.12	+1.08	1.84	−1.44	4.51	−0.01	3.27	−0.34	4.03	+1.27	4.06	−0.25	3.42	−0.57	4.20	+0.68	3.01	+0.04	9.34	+6.90	4.34	+1.47	3.80	−0.46	50.97	+ 8.36
Richmond	3.45	−0.62	2.11	−1.53	.....	......	2.96	−0.65	5.17	+1.59	5.46	+1.52	0.40	−3.47	5.27	+2.07	2.21	−0.43	6.10	+3.29	7.53	+4.66	6.02	+2.36	......	......
Vanceburg	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	.....	......	1.30	......	8.11	......	7.25	......	5.84	......	......	......
Weeksbury	4.50	......	1.35	......	.....	......	.....	......	.....	......	8.04	......	3.17	......	.....	......	.....	......	.....	......	.....	......	.....	......	......	......
Williamsburg	5.23	+1.20	2.21	−1.28	4.53	−0.39	3.82	−0.58	3.72	−0.36	3.91	−0.64	1.36	−4.51	3.85	−0.67	1.10	−2.26	10.12	+7.57	6.64	+3.71	3.09	−0.60	49.58	+ 1.19

The departures from normal precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

T Precipitation is less than 0.01 inch rain or melted snow.

* +10.06 inches.

Monthly and Annual Mean Temperatures for the Year 1919, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
WESTERN DIVISION.																										
Beaver Dam	39.8	+ 5.2	39.4	+ 4.2	48.6	+ 1.9	58.2	+ 2.8	64.4	− 1.5	77.9	+ 1.3	80.8	+ 3.2	76.0	0.2	71.8	+ 1.2	66.2	+ 8.8	47.6	+ 1.3	36.4	+ 0.8	58.9	+ 2.6
Blandville	39.0	+ 5.6	39.8	+ 3.4	49.5	+ 2.4	58.6	+ 1.4	63.9	− 2.6	76.9	+ 2.0	80.0	+ 2.1	76.2	− 0.6	72.6	+ 1.6	64.6	+ 6.5	46.8	+ 0.2	[illegible]	− 2.3	58.5	+ 1.6
Calhoun	39.0	+ 2.7	a39.2	+ 1.9	49.2	− 0.1	58.2	− 0.7	61.0	− 3.4	a77.3	+ 2.3	80.6	+ 2.8	76.2	− 1.3	73.1	+ 0.9	65.8	+ 6.5	47.4	− 1.0	a31.3	− 3.1	58.7	+ 0.6
Earlington	39.7	+ 4.1	39.6	+ 3.3	49.9	+ 2.6	60.8	+ 3.6	65.9	0.9	80.0	+ 4.4	82.9	+ 4.5	78.2	+ 1.1	75.0	+ 3.9	66.6	+ 7.3	48.0	+ 0.1	35.8	− 2.8	60.2	+ 2.6
Greenville	39.4	......	39.8	......	49.8	......	58.2	......	64.6	......	77.1	......	80.6	......	b75.8	......	a72.0	......	65.9	......	47.7	......	35.6	......	58.9	......
Hopkinsville	39.0	+ 1.0	40.8	+ 3.8	49.6	+ 0.4	59.4	+ 2.6	65.4	− 2.2	78.6	+ 3.4	81.8	+ 3.0	77.2	− 0.6	73.4	+ 1.5	68.0	+ 7.6	49.2	+ 0.9	36.1	− 1.7	59.9	+ 1.7
Marion	38.8	+ 2.8	39.6	+ 3.9	48.8	+ 0.2	57.1	− 0.2	64.4	− 2.7	77.2	+ 2.3	80.6	+ 2.8	76.4	− 1.7	73.4	+ 1.2	65.4	+ 6.0	48.0	− 0.3	33.6	− 3.9	58.6	0.9
Mayfield	38.0	+ 2.4	38.7	+ 1.5	b47.3	− 4.1	a58.4	+ 1.2	63.8	− 2.4	76.2	+ 2.6	80.0	+ 2.4	76.4	− 0.9	71.6	+ 0.5	a64.1	+ 5.6	47.5	− 1.5	34.1	− 4.4	58.0	+ 0.2
Owensboro	37.5	+ 2.0	39.0	+ 4.3	48.6	+ 1.7	57.4	+ 2.2	63.0	− 3.0	77.2	+ 3.1	79.5	+ 1.5	75.0	− 1.1	72.2	+ 1.5	63.8	+ 4.8	47.2	− 0.3	33.6	− 3.0	57.8	+ 1.1
Paducah (Lone Oak)	39.4	+ 2.4	39.9	+ 2.5	49.0	− 1.4	60.1	+ 0.8	65.6	− 3.6	78.8	+ 1.0	82.6	+ 1.6	78.5	− 2.2	73.5	− 0.5	66.2	+ 5.2	48.0	− 0.9	32.4	− 6.2	59.5	0.0
Princeton	b37.0	+ 1.6	c38.0	+ 2.8	a48.3	0.0	a58.8	+ 0.6	a66.2	− 1.3	b78.3	+ 2.3	80.4	+ 1.8	76.8	− 1.8	b72.3	+ 0.9	j64.0	+ 5.2	k45.7	− 0.8	l33.4	− 3.3	58.3	+ 0.7
Russellville	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	71.0	− 0.5	64.4	......	b47.0	......	34.6	......	......	......
CENTRAL DIVISION.																										
Alpha	41.0	+ 0.7	40.4	+ 1.9	48.8	− 1.9	57.8	+ 0.5	64.4	− 2.2	74.9	+ 1.8	......	......	73.8	− 2.3	69.2	− 1.5	67.6	+ 8.1	49.6	+ 0.1	40.9	+ 0.5	......	......
Anchorage	35.4	+ 1.8	36.4	+ 4.3	45.5	+ 0.4	54.0	+ 0.6	61.9	− 2.5	75.4	+ 3.4	78.6	+ 2.5	73.6	− 1.0	69.9	+ 0.8	63.2	+ 6.7	44.7	+ 0.2	30.8	− 3.1	55.8	+ 1.2
Bardstown	37.8	+ 1.9	38.6	+ 4.1	48.2	+ 1.6	56.4	+ 1.1	63.6	− 3.4	76.7	+ 2.1	79.4	+ 0.9	75.0	2.2	72.0	+ 0.1	65.4	+ 5.9	47.4	+ 0.4	33.9	− 1.8	57.9	+ 1.9
Bowling Green	40.2	+ 3.6	40.9	+ 3.7	50.6	+ 2.3	59.6	+ 1.5	66.8	− 0.8	79.6	+ 3.8	82.8	+ 3.9	78.9	0.0	74.0	+ 2.3	67.9	+ 8.7	48.6	+ 1.3	36.2	− 1.4	60.5	+ 2.4
Edmonton	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Eubank	37.8	+ 2.9	b38.3	+ 5.0	47.0	+ 0.7	55.8	+ 2.0	63.4	− 0.8	74.6	+ 3.5	76.8	+ 2.1	73.9	+ 0.1	69.2	+ 0.5	a65.8	+ 9.1	47.0	+ 2.5	35.2	− 0.5	57.1	+ 2.3
Frankfort	37.2	+ 1.0	38.7	+ 3.9	48.0	+ 1.8	55.8	+ 0.7	64.0	− 0.9	77.2	+ 3.9	79.6	+ 2.7	75.6	+ 0.6	71.2	+ 2.6	65.5	+ 9.0	47.0	+ 0.8	33.6	− 3.7	57.8	+ 1.9
Franklin	41.1	+ 3.5	40.9	+ 2.3	49.0	− 1.1	59.2	+ 0.1	65.4	− 1.6	78.6	+ 3.7	82.5	+ 5.0	77.6	+ 0.4	73.4	+ 1.4	68.4	+ 9.1	49.4	+ 0.9	37.8	− 2.2	60.3	+ 1.8
Greensburg	37.6	+ 3.4	39.1	+ 5.4	46.6	− 0.2	56.4	+ 1.4	63.6	− 1.3	75.3	+ 1.8	78.0	+ 1.6	73.6	− 2.0	69.5	− 0.5	66.2	+ 9.7	47.2	+ 2.5	a35.7	− 0.3	57.4	+ 1.8
Irvington	38.4	+ 2.2	38.1	+ 3.8	47.6	+ 0.8	57.0	+ 1.5	63.6	− 2.7	77.0	+ 3.3	79.5	+ 2.1	74.2	− 1.8	71.9	+ 1.5	65.2	+ 9.6	46.1	− 0.6	33.9	− 2.1	57.7	+ 1.5
Junction City	38.2	+ 3.6	38.1	+ 5.0	46.4	+ 0.3	55.2	+ 0.7	63.6	− 0.9	75.4	+ 3.8	77.6	+ 2.6	73.5	− 0.8	70.0	+ 0.4	65.6	+ 8.1	48.2	+ 5.6	35.8	+ 0.5	57.3	+ 2.4
Leitchfield	36.8	+ 1.7	37.4	+ 3.4	47.0	+ 1.0	56.2	+ 0.8	63.2	− 2.3	76.4	+ 3.5	79.4	+ 1.8	74.2	− 1.2	71.0	+ 1.2	65.6	+ 7.5	46.8	+ 0.5	34.6	− 1.2	57.4	+ 1.5
Lexington	36.9	+ 3.9	36.0	+ 0.4	45.6	+ 2.2	54.3	+ 0.6	62.3	− 2.0	76.4	+ 3.2	78.8	+ 2.2	73.5	− 1.1	71.5	+ 3.6	64.0	+ 7.5	44.9	+ 0.2	31.0	− 5.4	56.3	+ 1.3
LOUISVILLE	38.5	+ 4.2	37.8	+ 1.2	47.8	+ 2.5	56.6	+ 0.4	63.4	− 3.3	77.8	+ 2.8	80.3	+ 1.7	75.8	− 0.7	73.0	+ 3.1	64.6	+ 6.2	46.0	− 0.3	32.3	− 5.8	57.8	+ 1.0
Do (Cherokee Park)	35.6	+ 1.0	36.8	+ 1.6	44.8	− 0.5	53.8	− 2.1	62.0	− 3.7	......	......	......	......	73.2	− 2.1	70.3	+ 2.3	64.2	+ 7.0	46.4	− 0.2	32.5	− 2.4	......	......
St. John	36.4	+ 2.3	38.6	+ 5.6	47.4	+ 2.3	55.8	+ 1.4	62.8	− 1.9	76.1	+ 3.8	79.0	+ 3.3	74.2	− 0.5	71.6	+ 2.5	65.4	+ 7.8	47.7	+ 2.4	a33.2	− 1.4	57.4	+ 2.3
Scott	36.4	+ 3.3	35.9	+ 5.2	44.8	+ 1.4	53.4	+ 0.3	61.2	− 2.6	75.1	+ 3.5	77.1	+ 0.5	73.9	− 1.2	71.0	+ 1.5	63.2	+ 5.4	44.0	− 1.0	29.6	− 3.6	55.5	+ 1.1
Shelbyville	36.4	+ 3.1	36.8	+ 3.0	46.2	+ 1.5	54.6	− 0.1	62.0	− 3.0	75.8	+ 2.3	78.8	+ 1.9	74.2	− 1.3	68.8	− 0.4	63.6	+ 6.9	45.4	+ 1.0	30.0	− 5.0	56.0	+ 0.8
Taylorsville	35.6	+ 0.5	37.7	+ 3.3	45.5	− 0.3	54.7	+ 0.3	62.4	− 2.1	75.6	+ 3.3	78.6	+ 1.7	72.4	− 2.0	68.8	+ 0.6	63.8	+ 7.8	45.4	+ 0.5	32.5	− 2.6	56.0	+ 0.9
Williamstown	38.7	+ 6.0	37.1	+ 6.1	47.2	+ 4.0	55.6	+ 3.3	62.2	− 0.9	76.2	+ 5.6	79.2	+ 3.6	75.4	+ 1.6	73.3	+ 4.9	a67.2	+ 10.2	45.8	+ 0.7	32.4	− 0.5	57.5	+ 3.7
EASTERN DIVISION.																										
Beattyville	36.8	+ 2.8	38.6	+ 4.1	47.6	+ 2.9	55.4	+ 1.5	64.5	+ 0.3	76.1	+ 4.1	78.8	+ 3.4	74.4	− 0.8	70.8	+ 1.7	66.1	+ 9.0	a48.2	+ 4.1	c36.1	+ 2.0	57.8	+ 3.0
Berea	......	......	......	......	47.7	+ 0.4	56.4	+ 0.8	64.6	− 1.2	77.1	+ 4.6	78.9	+ 2.5	74.2	− 0.4	71.3	+ 2.0	a65.9	+ 7.4	48.4	+ 1.2	34.8	− 1.9	......	......
Farmers	36.8	+ 1.5	37.4	+ 1.8	46.0	+ 1.1	54.8	+ 0.4	63.5	− 0.2	74.8	+ 3.6	78.6	+ 3.7	73.0	− 0.8	69.4	+ 1.7	64.4	+ 7.8	46.8	+ 1.8	33.4	− 1.7	56.6	+ 1.8
Harlan	......	......	f41.8	......	c49.8	......	c58.0	......	65.6	......	i75.2	......	77.8	......	a73.4	......	......	......	n67.6	......	h52.6	......	40.6	......	......	......
Maysville	35.6	+ 2.5	36.8	+ 3.8	45.4	+ 1.3	55.8	+ 2.2	64.5	− 0.6	77.8	+ 4.9	79.6	+ 2.6	76.0	+ 0.3	73.0	+ 3.4	66.2	+ 9.1	47.6	+ 3.0	32.2	− 1.6	57.5	+ 2.5
Middlesboro	......	......	......	......	......	......	......	......	......	......	74.8	+ 2.6	77.8	+ 3.1	73.9	− 0.5	69.6	+ 0.8	67.3	+ 10.1	48.8	+ 3.0	39.6	+ 1.7	......	......
Mount Sterling	35.8	+ 2.2	36.8	+ 3.4	45.3	+ 1.6	55.1	+ 1.5	63.7	− 0.4	76.2	+ 3.8	77.8	+ 2.0	73.2	− 0.9	70.0	+ 2.4	65.9	+ 10.3	......	......	32.7	− 2.2	......	......
Richmond	39.0	+ 5.3	38.0	+ 2.7	47.6	+ 2.2	56.2	+ 0.7	63.6	− 1.9	76.2	+ 2.8	79.0	+ 2.1	73.6	− 2.0	72.6	+ 2.0	67.0	− 8.6	49.2	+ 2.4	35.0	+ 2.1	58.1	+ 1.9
Weeksbury	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Williamsburg	38.2	− 0.4	40.2	+ 2.7	48.2	+ 2.1	56.9	+ 1.2	66.0	− 0.3	76.2	+ 2.7	78.8	+ 2.0	75.2	− 0.9	70.8	+ 0.2	a66.6	+ 7.1	b50.6	+ 3.5	41.4	+ 3.1	59.1	+ 1.9

All temperature data are taken from self-registering thermometers.

The departures from normal temperature are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

MONTHLY SUMMARIES, 1919.

MONTH.	Temperature.				Precipitation.		Average number of days.			
	State average.	*Departure.	Highest.	Lowest.	State average.	*Departure.	With .01 or more rain.	Clear.	Partly cloudy.	Cloudy.
January	37.9	+ 2.7	68	− 1	3.62	− 0.77	7	16	6	9
February	38.6	+ 3.0	69	12	1.79	− 1.81	9	11	5	12
March	47.6	+ 1.6	81	16	5.65	+ 0.99	9	15	6	10
April	56.7	+ 0.8	89	19	3.51	− 0.43	10	13	7	10
May	63.9	− 1.7	95	35	6.05	+ 2.10	11	9	8	14
June	76.7	+ 3.0	103	51	4.00	− 0.18	10	14	10	6
July	79.5	+ 2.8	104	50	2.10	− 2.20	5	20	8	3
August	75.0	− 0.7	104	47	3.49	− 0.07	8	17	8	6
September	71.5	+ 1.5	102	40	1.69	− 1.07	4	20	6	4
October	65.6	+ 7.8	98	35	7.99	+ 5.49	15	8	7	16
November	47.4	+ 1.3	78	16	7.31	+ 3.96	9	15	5	10
December	34.6	− 2.5	68	3	4.93	+ 0.99	7	12	5	14
Annual means and extremes	57.9	+ 1.6	104	− 1	52.13	+ 7.00	107	170	81	114

*Compared with 30 years' normal.

LISTS OF COOPERATORS.

Cooperative Observers.

Stations.	Observers.	Stations.	Observers.	Stations.	Observers.	Stations.	Observers.
Alpha	Taylor Davis.	Cloverport	W. A. Cockerill.	Hopkinsville	W. E. Graves.	Paducah (Lone Oak)	E. Futrell, Jr.
Anchorage	C. E. Barret.	Cynthiana	P. H. Kehoe.	Irvington	W. J. Piggott.	Paducah	F. L. Brown.
Bardstown	Chas. M. Talbott.	Earlington	Brick Southworth.	Junction City	E. L. Grubbs.	Pikeville	I. M. Williams.
Beattyville	Mrs. Sabina E. Hall	Edmonton	P. W. Ray.	Jackson	J. L. McCoy.	Princeton	Ray Baker.
Beaver Dam	Miss Addie B. Taylor	Eubank	Mrs. Katie Payne	Leitchfield	John E. Stone.	Richmond	J. W. Crooke.
Berea	Chas. D. Lewis.	Falmouth	J. V. Oldham.	Lexington	U. S. Weather Bureau	Russellville	Wm. A. Shelton.
Blandville	E. W. Horr.	Farmers	Margaret Carter.	Louisa	Carrie S. Adams	St. John	Bethlehem Academy
Bowling Green	Mrs. L. G. Causey.	Frankfort	Mrs. Amelia Wood	Louisville	U. S. Weather Bureau	Scott	E. B. Wilson.
Brownsville	Jas. H. Young.	Franklin	V. P. Atkinson.	Marion	B. C. Paris.	Shelbyville	F. A. Miller.
Burnside	F. E Bradshaw.	Greensburg	Mrs. B. K. H. Alcorn	Mayfield	J. N. Davis.	Taylorsville	E. D. Bourne.
Calhoun	W. A. Taylor.	Greenville	C. R. Lovell.	Maysville	H. M. Robinson.	Vanceburg	E. A. Smith.
Carrollton	Charlie Oliver.	Harlan	W. W. Duffield.	Middlesboro	B. H. Perkins.	Williamsburg	N. C. Jones.
Catlettsburg	Forester Farley.	Henderson	W. W. Shelby.	Mount Sterling	W. R. McKee.	Williamstown	Miss Rose Carter
Cherokee Park	Wm. I. Hunt.	High Bridge	Miss Lulu Wood.	Owensboro	Henry S. Berry.	Woodbury	J. C. Stinson.

Daily Forecast Display and Distributing Stations.

Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen
Beaver Dam	Mgr. Cum. Tel. Office	Eddyville	Mgr. Cum. Tel. Office	Louisville	U. S. Weather Bureau	Paducah	East Tenn. Tel. Co.
Benton	Mgr. Cum. Tel. Office	Elizabethtown	Mgr. Cum. Tel. Office	Madisonville	Mgr. Cumb. Tel. Co.	Pikeville	E'n Ky. Home Tel. Co
Bowling Green	A. M. Causey.	Frankfort	Mrs. Amelia Wood.	Madison .... Ind.	Chas. G. Dickerson	Prestonburg	Sou. Bell Tel. Co.
Burnside	A. B. Massey.	Franklin	FarmersMut'lTelCo.	Maysville	Mrs. Mary D. Marsh	Princeton	Mgr. Cumb. Tel. Co.
Cadiz	Mgr. Cum. Tel. Office	Fulton	Fulton Leader.	Middlesboro	B. H. Perkins.	Richmond	J. W. Crooke.
Catlettsburg	Mrs. M. M. Bruns.	Henderson	Mgr. Postal TelOffice	Morganfield	Mgr. Cumb. Tel. Co.	Shelbyville	Mgr. Cumb. Tel. Co.
Cave City	Geo. T. Tucker.	Hickman	Sexton & Speer	Mount Sterling	Cumb. Tel. Co.	Union	Cons. Telephone Co.
Cloverport	Wm. A. Cockerill	Hopkinsville	Christian-Todd T. Co	Murray	Mgr. Cumb. Tel. Co.	Versailles	Postmaster
Danville	Mgr. Cum. Tel. Co.	Lebanon	Cumb. Tel. Co.	Olive Hill	B. S. Tel. Co.	Wickliffe	Mgr. Cumb. Tel. Co.
Earlington	Brick Southworth.	Lexington	U. S. Weather Bureau	Owensboro	Mgr. Cum. Tel. Office	Williamsburg	Mgr. Cumb. Tel. Co.

NOTE—Tables and charts giving climatic data for Kentucky in detail during 1918 have been published for each month at the Kentucky section center, Weather Bureau Office, Louisville, Ky., and can be obtained from the Official in Charge at that office. Indexes to special articles published during past years in Kentucky climatological reports will be found in the Monthly Report for June, 1909,

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

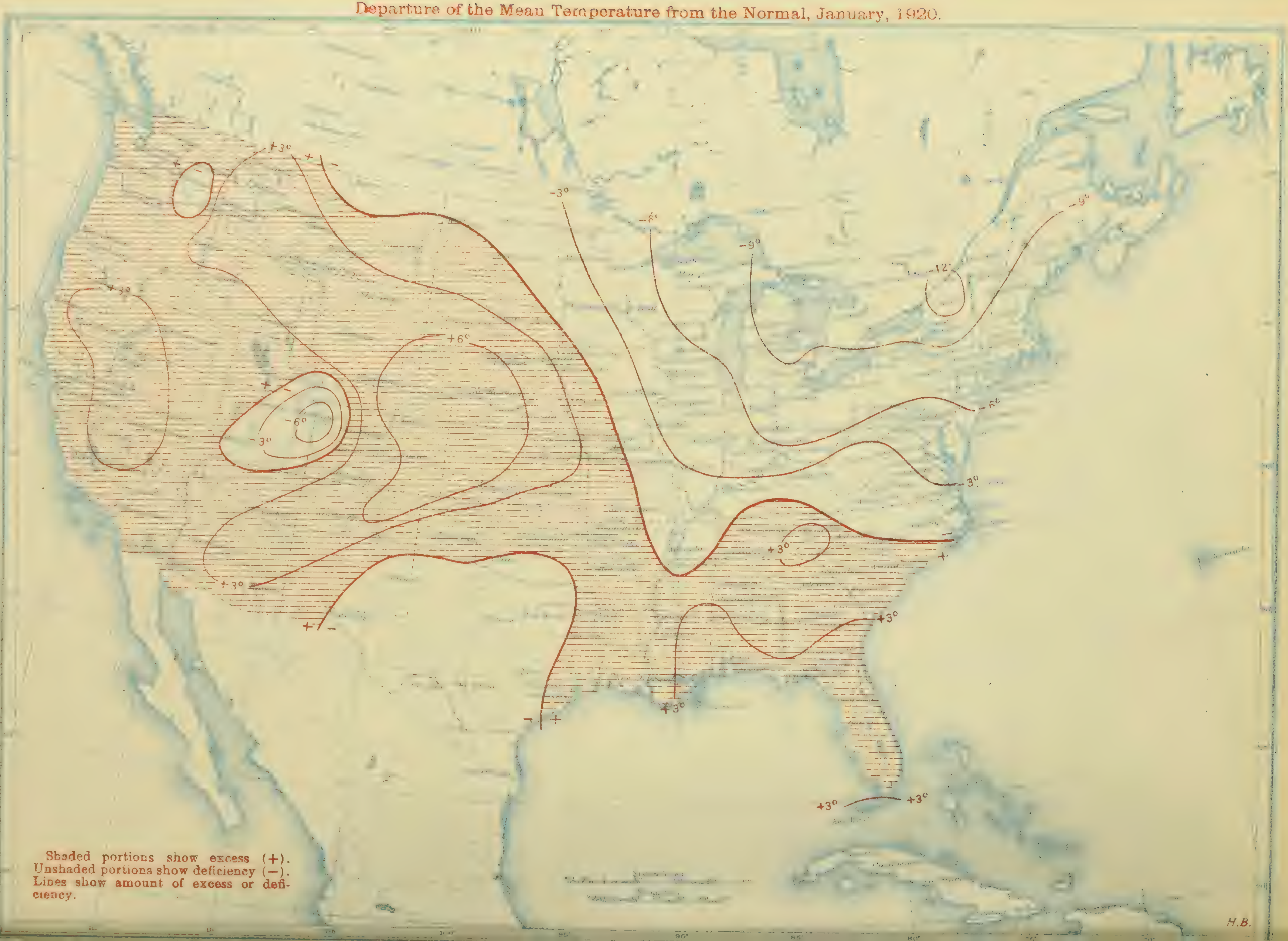
KENTUCKY SECTION

JANUARY, 1920

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MARCH 16 1920.

Departure of the Mean Temperature from the Normal, January, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXV. LOUISVILLE, KY., JANUARY, 1920. No. 1

GENERAL SUMMARY.

The month began with a severe cold wave, which was followed by several days with minimum temperatures near zero. After the 6th temperatures averaged near normal on most days, generally rising above freezing in the daytime and falling below at night. The alternate freezing and thawing caused much injury to wheat, the snowfall being so light as to afford only slight protection.

As in the preceding three months, precipitation averaged considerably above normal, the heaviest rainfall occurring over the upper portions of the river basins and resulting in serious floods in all the streams of the State. The heavy rains together with the heaving freezes, softened the roads to an unusual degree, so that the surface of improved highways was cut entirely through at frequent intervals and damaged to an extent not approached in this State in many years.

The sleet and ice storms of the 21st-23d caused widespread damage to fruit and shade trees, timber, and telephone and telegraph lines throughout the northern counties. A heavy coating of ice lay on the ground for several days, making travel on roads extremely dangerous and causing great inconvenience to farmers in caring for their stock. Roads were rendered impassable for a few days by debris from fallen trees and poles.

PRESSURE.

The movement of pressure formations that influenced weather conditions over this section was unusually active, the most important being as follows: 7-9th, a trough-shaped depression moving northeastward from the lower Mississippi Valley caused heavy rains and floods in this State; 15-17th, a deep "low" following nearly the same path was attended by light rains; 20th-21st, a trough of low moving eastward caused rain which froze on trees and ground; 23d-24th, a "low" moving to the southward was attended by heavy rains over southern and central counties and a further accumulation of ice over extreme northern counties. These rains caused floods in many streams.

High pressure areas on the 1st-3d and 4-5th, moving eastward from the plains states caused the coldest weather of the month. On the 21st-22d a "high" lying over northern districts and extending southward into the Ohio Valley combined with the "low" to the southward to produce the ice storm.

The mean sea-level pressure, based on the records of two stations, was 30.26 inches. The extremes were 30.70 inches on the 25th at both Lexington and Louisville, and 29.52 inches on the 16th at Lexington.

TEMPERATURE.

The average temperature for the month, 39 stations reporting, was 33,4°, which is 1.8° below normal. Except in the period 2d-6th, no low temperatures were recorded. Moderate temperatures prevailed on the 19th-21st, and 30th-31st; and also on the 23d-24th in the southern and southeastern counties, when the temperature gradient across the State from north to south was 30° or more. Extremes at the various stations were 72° at Harlan on the 20th and −6° at Beattyville on the 5th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 55 stations, averaged 6.75 inches, which is 2.36 inches in excess of normal. It occurred mainly in two periods, 6-9th and 21st-24th, with light showers 15-17th. Excessive rains were general on the 8th, some of the 24-hour amounts being as follows: Calhoun, 3.05 inches; Greenville and Leitchfield, 4.50 inches; Bowling Green, 3.40 inches; Hopkinsville, 5.33 inches. The rains of the 21st-24th were not so heavy, but on account of the ice-covered soil the run-off was unusual in quantity and rapidity, enhancing their effect in producing headwater floods. Precipitation was heaviest in the central and southern counties, ranging from 7 to more than 11 inches. It was lightest in the counties along the Ohio River, where it ranged from 3 to 5 inches. Local variations in monthly totals were large for a winter month. Amounts at the various stations ranged between 11.43 inches at Russellville and 3.01 inches at Williamstown.

WIND.

The total wind movement at Louisville was 9,166 miles, and at Lexington 10,335 miles, with average hourly velocities of 12.3 and 13.9 miles, respectively. The maximum velocity for five minutes was at the rate of 54 miles per hour from the southeast on the 8th at Lexington, and 39 miles from the southwest on the 9th at Louisville.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 81 per cent, at 12 noon 70 per cent, and at 7 p. m. 71 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 50 and at Lexington 33.

MISCELLANEOUS

Jan. 21-22.—Estimates of damage to telegraph and telephone lines, fruit and shade trees, timber, and wheat, by sleet place the amount near $1,000,000 Wire service was demoralized and trolley service greatly hampered. Ice on roads and pavements caused many cases of personal injury, while a railroad wreck near St. Matthews was attributed to the icy rails.

COMPARATIVE DATA FOR JANUARY.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain
1889	38.0	+2.8	65	13	3.52	−0.87	
1890	44.0	+8.8	77	10	6.43	+2.04	
1891	37.0	+1.8	68	14	5.40	+1.01	
1892	29.0	−6.2	65	−6	2.72	−1.67	
1893	26.0	−9.2	67	−22	2.08	−2.31	
1894	38.0	+2.8	78	−12	2.91	−1.48	
1895	30.0	−5.2	78	−16	5.71	+1.32	11
1896	36.1	+0.9	74	−3	1.25	−3.14	6
1897	32.0	−3.2	75	−16	3.25	−1.14	8
1898	40.4	+5.2	72	6	8.76	+4.37	12
1899	34.4	−0.8	68	−18	6.23	+1.84	11
1900	37.2	+2.0	77	−8	2.80	−1.59	8
1901	36.7	+1.5	75	4	1.85	−2.54	7
1902	33.7	−1.5	70	5	5.14	+0.75	7
1903	34.8	−0.4	82	−9	2.50	−1.89	9
1904	32.3	−2.9	70	−9	3.17	−1.22	10
1905	27.5	−7.7	70	−15	2.83	−1.56	11
1906	39.7	+4.5	80	−9	3.48	−0.91	8
1907	43.2	+8.0	83	−11	8.02	+3.63	14
1908	35.0	−0.2	62	7	2.20	−2.19	8
1909	38.3	+3.1	77	−8	3.47	−0.92	9
1910	33.8	−1.4	76	−20	4.41	+0.02	10
1911	39.7	+4.5	73	−16	2.88	−1.51	11
1912	25.9	−9.3	61	−20	3.09	−1.30	8
1913	42.5	+7.3	76	13	11.41	+7.02	14
1914	39.4	+4.2	79	5	2.31	−2.08	6
1915	33.0	−2.2	65	0	5.03	+0.64	13
1916	41.2	+6.0	78	−5	7.27	+2.88	14
1917	36.7	+1.5	74	−17	6.38	+1.99	12
1918	20.6	−14.6	62	−20	5.09	+0.70	14
1919	37.9	+2.7	68	−1	3.62	−0.77	7
1920	33.4	−1.8	72	−6	6.75	+2.36	[illegible]

Climatological data for January, 1920.

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	34.4	− 0.2	66	20	7	3†	38	3.60	−0.86	2.01	T.	8	16	4	11	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	33.4	0.0	67	20	10	3†	31	6.25	+1.62	2.72	0.5	8	11	7	13	n.	E. W. Horr.
Calhoun	McLean	437	16	32.9	− 3.4	64	20	7	3†	40	6.44	+1.35	3.05	T.	9	6	14	11	n.	W. A. Taylor.
Earlington	Hopkins	420	29	34.4	− 0.9	69	20	7	5	36	6.86	+2.38	2.15	T.	9	15	0	16	n.	Brick Southworth.
Greenville	Muhlenburg	519	3	34.8	......	71	21	5	3	42	7.96	......	4.50	T.	8	11	10	10	n.	C. R. Lovell.
Henderson	Henderson	327	12	.....	.....	.....	.....	.....	.....	.....	3.84	+0.11	1.15	T.	8	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	23	36.2	− 1.8	67	20	8	3	39	10.82	+5.69	5.33	T.	9	8	6	17	n.	W. E. Graves.
Marion	Crittenden	571	21	35.5	− 2.5	67	20	10	3†	37	5.60	+0.80	2.60	T.	6	10	7	14	nw.	B. C. Paris.
Mayfield	Graves	364	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	....	J. N. Davis.
Owensboro	Daviess	479	23	31.9	− 3.6	60	20	9	3	31	4.89	−0.38	2.22	T.	7	9	8	14	nw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	32.6	.....	65	20	10	3†	43	6.38	......	2.00	T.	9	14	4	13	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	.....	.....	.....	.....	.....	.....	5.84	+1.21	1.86	T.	7	....	....	....	....	Frank L. Brown.
Princeton	Caldwell	529	10	^{f}32.0	− 3.4	59^{g}	19	11^{f}	4†	36^{f}	.....	......	.....	T.	....	9^{g}	0^{g}	15^{g}	w.	Ray Baker.
Russellville	Logan	590	6	34.0	− 1.3	67	20	6	3	40	11.43	+5.74	3.95	T.	8	16	2	13	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	38.6	− 1.7	64	20	5	5	24	8.00	+3.15	.....	1.7	9	3	6	22	e.	Taylor Davis.
Anchorage	Jefferson	700	19	29.4	− 3.6	64	20	− 5	5	36	5.81	+1.73	2.65	1.4	9	13	5	13	se.	C. E. Barret.
Bardstown	Nelson	637	23	33.3	− 2.6	62	20†	0	5	35	7.36	+2.53	2.90	1.0	8	17	5	9	n.	Chas. M. Talbott.
Bowling Green	Warren	500	29	37.0	+ 0.4	66	20	7	3†	43	11.08	+6.44	3.40	T.	8	10	5	16	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	.....	.....	.....	.....	.....	.....	10.45	......	2.82	0.5	11	....	....	....	....	James H. Young.
Burnside	Pulaski	773	27	.....	.....	.....	.....	.....	.....	.....	8.24	+3.69	1.65	T.	10	....	....	....	....	F. E. Bradshaw.
Carrollton (Lock No.)	Carroll	492	21	.....	.....	.....	.....	.....	.....	.....	4.26	−0.62	1.35	......	10	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	.....	.....	.....	.....	.....	.....	5.31	......	1.42	0.4	10	....	....	....	....	W. A. Cockerill.
Eubank	Pulaski	1177	25	34.0	− 0.9	63	20†	3	3	38	7.44	+3.47	2.30	1.0	7	7	3	21	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	32.4	− 3.8	63	20†	0	5	34	6.36	+2.23	1.75	1.2	13	9	3	19	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	37.0	- 0.6	67	20	8	3	40	7.71	+4.11	2.50	T.	8	10	7	14	n.	Prof. V. P. Atkinson.
Greensburg	Green	581	27	34.6	+ 0.4	65	20†	3	5	36	9.81	+5.30	2.88	0.1	13	9	5	17	nw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	.....	.....	.....	.....	.....	.....	7.53	+3.29	2.62	......	10	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	36.2	− 3.6	65	20	6	3	36	6.38	+1.96	3.12	T.	8	9	5	17	nw.	W. J. Piggott.
Junction City	Boyle	985	26	34.0	− 0.6	66	21	1	3	38	8.82	+4.40	3.00	2.8	14	14	8	9	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	33.0	− 2.1	62	20	6	3	35	7.43	+2.91	4.50	0.2	8	6	11	14	nw.	John E. Stone.
Lexington	Fayette	989	32	30.1	− 2.9	61	20	2	3	32	5.26	+1.43	2.12	1.4	14	6	8	17	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	30.5	− 3.8	64	20	5	3	33	4.77	+0.87	2.25	2.1	11	10	6	15	w.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	31.3	− 3.3	63	20	− 1	5	36	4.96	+0.18	1.29	2.7	8	10	9	12	nw.	Wm. I. Hunt.
St. John	Hardin	777	23	32.4	− 1.7	62	20	3	3	36	6.88	+2.31	3.10	0.5	9	12	7	12	......	Sisters of Loretto.
Scott¶	Kenton	900	22	27.8	+ 5.3	60	20	− 4	3	39	3.42	+0.67	1.60	0.8	11	7	7	17	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	29.3	− 4.0	58	20	− 5	5	34	5.82	+1.56	2.25	2.0	11	13	6	12	n.	F. A. Miller.
Taylorsville	Spencer	489	17	31.2	− 3.9	62	20	− 3	5	35	6.96	+2.27	2.59	1.8	10	9	5	17	se.	E. D. Bourne.
Williamstown	Grant	943	17	31.2	− 1.5	61	20	− 4	3	40	3.01	−0.86	0.90	0.9	11	5	10	16	......	Miss Rose Carter.
Woodbury	Butler	533	2	.....	.....	.....	.....	.....	.....	.....	9.35	......	2.76	T.	9	....	....	....	....	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	16	35.3	+ 1.3	67	23†	− 6	5	41	8.41	+3.75	2.60	0.5	13	3	4	24	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	33.8	− 3.5	64	20	− 4	5	39	8.41	+3.88	2.75	3.5	13	7	8	16	w.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	13	.....	.....	.....	.....	.....	.....	.....	5.51	+1.49	1.60	0.4	11	....	....	....	....	Forester Farley.
Cynthiana	Harrison	684	2	.....	.....	.....	.....	.....	.....	.....	5.20	.....	1.75	T.	8	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	.....	.....	.....	.....	.....	.....	5.19	+1.49	1.52	T.	12	9	4	18	s.	J. V. Oldham.
Farmers	Rowan	668	12	32.5	− 2.3	64	20	5	3	36	6.20	+1.78	3.00	T.	6	13	12	6	w.	Miss Margaret Carter.
Harlan	Harlan	1197	2	^{b}38.8	....	72^{b}	20	4^{b}	3	32	5.82	......	1.48	2.0	11	12	6	13	s.	Will Ward Duffield.
Jackson	Breathitt	776	8	.....	.....	.....	.....	.....	.....	.....	7.89	+4.13	1.95	3.6	11	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	5	.....	.....	.....	.....	.....	.....	.....	8.76	......	1.60	2.0	13	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	16	.....	.....	.....	.....	.....	.....	.....	7.05	+3.45	2.92	0.2	14	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	22	31.5	1.6	62	20†	2	3	34	5.77	+1.61	1.40	T.	9	11	2	18	n.	Harry M. Robinson.
Middlesboro	Bell	1128	21	36.8	− 1.0	64	21†	1	5	35	6.33	+1.65	1.75	0	10	8	13	10	......	B. H. Perkins.
Mount Sterling	Montgomery	930	30	31.2	− 2.4	61	20	− 2	5	36	5.45	+0.73	2.46	1.7	10	16	0	15	w.	W. R. McKee.
Oliver	Greenup	......	0	.....	.....	.....	.....	.....	.....	.....	5.03	......	1.51	0.5	11	....	....	....	....	Percy Humphrey.
Pikeville	Pike	634	14	.....	.....	.....	.....	.....	.....	.....	7.68	+3.64	1.44	1.0	11	....	....	....	....	I. M. Williams.
Richmond	Madison	926	25	32.8	- 0.9	62	20	0	3†	35	7.70	+3.63	2.60	0.1	10	10	3	18	......	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	.....	.....	.....	.....	.....	.....	5.02	......	1.29	0.5	8	....	....	....	....	Samuel Johnson.
Williamsburg	Whitley	939	22	38.6	0.0	68	20†	1	5	41	7.74	+3.71	1.91	0.8	12	5	12	14	w.	D. B. Bradley.
State averages and extremes				33.4	....	72	20	− 6	5	43	6.72	.....	5.33	0.7	10	10	6	15	n.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

‡ Post-office address, Normal, Ky.; ‡‡ Nerinx, Ky.; ¶ Covington, Ky.

Rivers.—In the Kentucky River crest stages were reached as follows: High Bridge, 33.8 feet on the 10th; and 31.7 feet on the 25th and 26th; Frankfort, 34.3 feet on the 10th; and 33.3 feet on the 26th; Jackson, 30.0 feet and Beattyville 35.0 feet on the 24th. Except for flooding of basements in Frankfort and suspension of business for a few days in the mining section along the upper course of the river, no damage of importance was reported. The following crest stages were recorded along Green River: Lock No. 6, Brownsville, 40.8 feet on the 11th, and 39.4 feet on the 25th; Lock No. 4, Woodbury, 47.4 feet on the 12th and 45.7 feet on the 26th; Lock No. 2, Rumsey, 41.7 feet on the 11th and 41.6 feet on the 31st. Crests slightly above flood stage were reached at Evansville and Henderson on the 14th, but at no other place during this rise. Flood stage was again reached at Evansville on the 27th and at Cloverport on the 28th, with crest stages of 40.3 feet at Evansville on the 30th and 42.6 feet at Cloverport on the 29th. Flood stages were not reached at Louisville or points above. Losses in these floods were slight because they followed floods of greater magnitude in December, 1919.

Daily Precipitation for January, 1920.

Stations.		Day of month																															Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G						.16	.08	2.01	.15							.15					[illegible]	[illegible]	.16									[illegible]
Blandville	M						.15	.22	2.72	.09						.19						[illegible]	[illegible]	1.57				T					[illegible]
Calhoun	G	T	T		T		.02	.15	3.05	.46							.19	T	T		.03	1.08	.40	1.06	T			T					[illegible]
Earlington	G				T			.09	1.95	2.15							.18		T			.62	[illegible]	.84				.10					[illegible]
Greenville	G						.05	.08	1.50	.10							.66					1.12	.92	.63									[illegible]
Henderson‖	O		T				T	.24	1.15	1.00							.07		T			.50	.08	.60	.26				T				3.84
Hopkinsville	C			T	T		.11	.34	5.33	.55							.46		T			2.03	.72	1.25	.03								10.82
Marion	O		T					.30	2.60										T		.40	[illegible]	.60	1.10									[illegible]
Mayfield‖	M																																
Owensboro	O		T		T		T	.10	2.22	.17							.05	T	T		.25		.40	1.70									[illegible]
Paducah (Lone Oak)	O						.05	1.25	2.00	.26							.19					.18	1.01	1.40	.04								6.38
Paducah	O						T	.26	1.86	1.30							T					.26	.52	1.58	.32								[illegible]
Princeton‖	G								2.00	2.00							.15		T														
Russellville‖	G							.20	2.90	3.95							.56	T	T			1.75	.65	.92	.50								11.43
Central Division.																																	
Alpha	C	.17			.17				.97	.82						.27						*	*	4.60	1.00								[illegible]
Anchorage	O	T	T	.03	T		.20		2.65	.19							.17				.09	1.06	.56	.86									5.81
Bardstown	S			.08				.35	2.90	.85							.15					.90	.55	1.58									7.36
Bowling Green	G		T		T		.15	2.40	3.40	.25							.30					2.50	.70	1.38									11.08
Brownsville‖	G		T		.05	T		.23	2.82	2.73							.38	.07	T			1.28	.83	1.52	.52				.02				10.45
Burnside‖	C	.56			T			.16	.48	1.30							.48	.06				1.35	1.65	1.12	1.08								8.24
Carrollton‖ (Lock No. 1)	O		.04	T				.27	.93	1.35	.02						.17	.04				.56		.70	.18								4.26
Cloverport‖	O		.04	T				.12	1.40	1.52							.04	.09		T		.60	.38	.74	.38				T				5.31
Eubank	C							.10	1.16	2.30												1.51	.55	.82	.60								7.44
Frankfort‖	K		.02	.02	.05			.35	1.13	1.75							.17	.07	T			.30	.81	1.27	.35				.07				6.36
Franklin	G						.22	T	2.50	.75							.52		T			1.80	.82	.95	.15								7.71
Greensburg	G			T	.01		.05	.13	2.88	2.00							.38				.02	2.50	.70	.90	.17			.02	.05				9.81
High Bridge‖	K							.28	1.93	2.62							.10	.01				.48	.80	.90	.40				.01				7.53
Irvington	O		T	T	T		.10	.12	3.12	.40							.12	T	T		T	1.42	.52	.58	T			T					6.38
Junction City	K	.01		.17			.04	.27	3.00	1.45							.21	T			.02	1.57	.90	.85	.20	.12		.01					8.82
Leitchfield	G		T	.02			*	.40	4.50								.25		T			.50	1.33	.43									7.43
Lexington ***	K		.01	.03	.02		.29	.48	2.08	.07					T	.01	.12	T	T		.20	.61	.57	.75	.01			.01					5.26
LOUISVILLE***	O	T	.01	.08			.14	.19	2.22	T						.08	.09	T	T		.11	.66	.33	.86	T			T					4.77
Do. (Cherokee Park)	O		T	.07				.23	1.28	1.29							.16					.78	.45	.70									4.96
St. John	S			.01	.04		T	.35	3.10	.53							.08				T	.75	.92	1.10									6.88
Scott	L	T	.01	.04			T	.05	1.60	.54						.04	.38	T			T	.25	.05	.41	.05								3.42
Shelbyville	S			.05			.07	.22	2.25	.63							.13	.15				.48	.34	1.48				.02					5.82
Taylorsville	S		.01	.05	T		.12	.16	2.59	.69							.10	T	T		T	1.40	.83	1.01	T			T					6.96
Williamstown	L		.03	.03				.05	.35	.80						.03	.10					.90	.10	.50	.12								3.01
Woodbury‖	G		T	T	T			.26	2.76	2.16							.37	.03				.99	.76	1.43	.59								9.35
Eastern Division.																																	
Beattyville‡	K	.20	T	.03	.03			.11	1.14	2.60							.19	.03	T			1.02	1.03	1.17	.75	.11							8.41
Berea	K		.12	.18			.08	.05	2.75	1.13							.20	.12			.08	1.70	.70	.92	.38								8.41
Catlettsburg‖	B	.04			.02			.18	.80	1.60						.05		.19				.54	.70	1.05	.34								5.51
Cynthiana‖	L			T	.05			.45	1.05	1.75				T	T							.15	.40	.90	.45								5.20
Falmouth‖	L		.03	T	.02			.31	.94	1.52						.06	.21		.05			.70	.12	.90	.33								5.19
Farmers	L			T				.20	3.00	1.20												1.00	.10	.70									6.20
Harlan	K	.34	.02		.05				.48	.26							.45	.15				1.48	.89	1.02	.68								5.82
Jackson‖	K	T		T	.15	.15		T	.50	1.95						T	.18	.06				1.25	1.30	1.45	.80	.10							7.89
London‖	C	.51		.05	.16			.18	.80	1.25							.50	.05				1.30	1.60	1.25	.90	.21							8.76
Louisa‖	B	.15		T	.02	T		.10	.10	2.92						.02	.10	.20	.12			.84	.40	1.15	.80	.13							7.05
Maysville‖	O				T			.28	.88	1.40						T	.18	.10				.65	.50	1.20	.58								5.77
Middlesboro	C	.42						.15	.42	.54							.57	.10				.95	.80	1.75	.63								6.33
Mount Sterling	L		.02	.05			T	.30	2.46							.07	.15	T	T		.02	1.02	.81	.55	T		T						5.45
Oliver	O			.01	.02			.17	.63	1.51						.05	T	.11				.55	.55	.81	.62								5.03
Pikeville‖	B	.32		T	.18	T		T	.84	1.18						T	.22	T				1.12	1.44	1.12	.84	.24			.18				7.68
Richmond	K		.05	T	.16		T	.23	2.60	1.55							.15	T			T	1.29	.65	.85	.17			T					7.70
Vanceburg‖	O		T					.24	.80	1.29							.06	.14				.51	.92	1.04				.02					5.02
Williamsburg‖	C	.23	T	T	.08			.04	.18	1.32							.51	.07			T	.79	1.91	1.47	1.10	.04			T				7.74

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky. (S) Salt (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

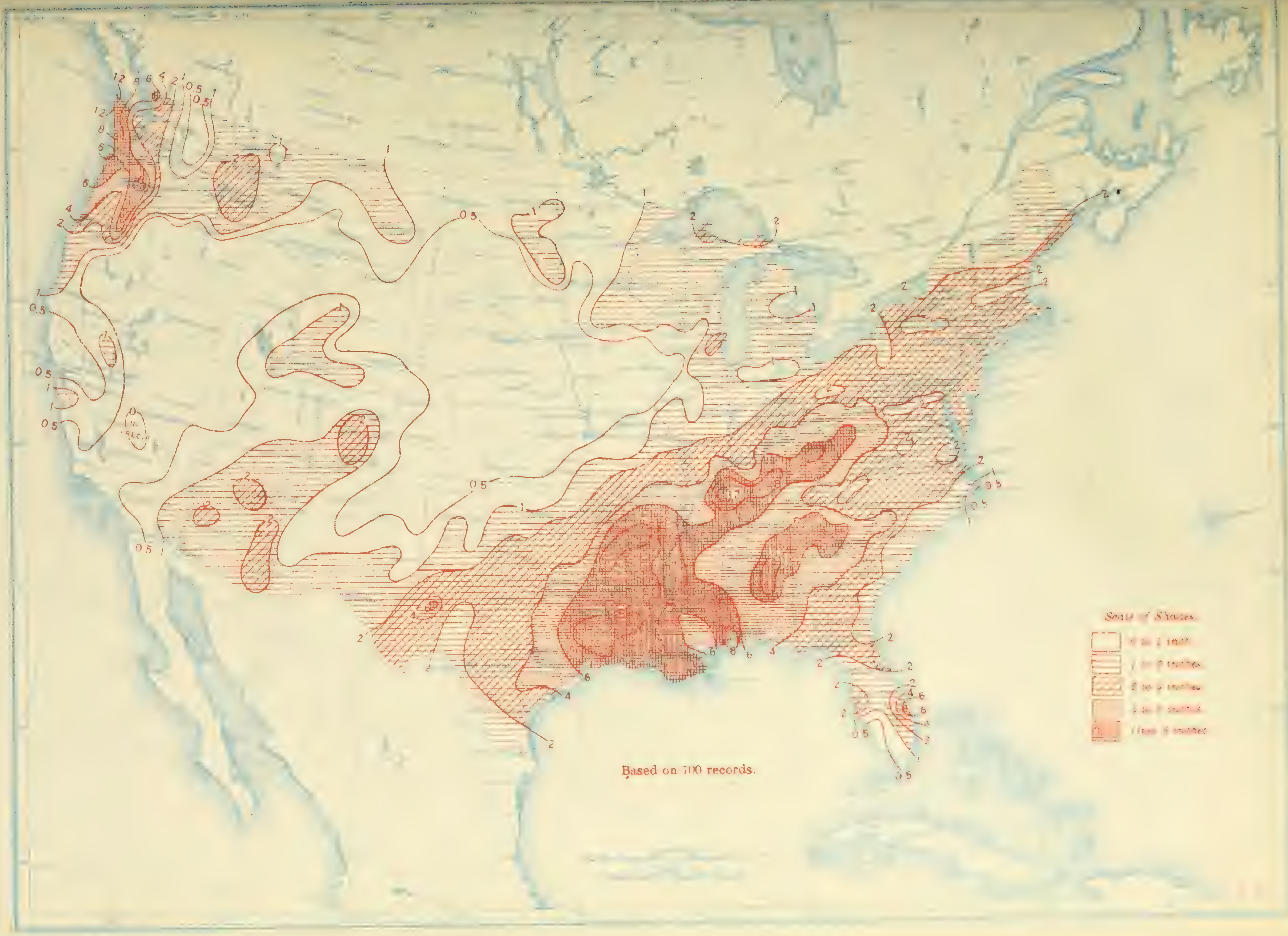
Daily temperatures for January, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	59	29	27	27	35	37	42	39	36	39	45	45	48	39	49	53	44	44	59	66	63	34	41	42	42	51	51	46	47	61	59	45.1
	Minimum	21	14	7	12	7	19	32	35	27	25	20	20	35	25	27	37	20	20	25	37	29	27	31	20	20	20	20	30	21	25	29	23.8
Blandville	Maximum	43	28	35	27	33	33	39	36	31	35	38	42	46	45	48	54	43	38	61	67	42	32	36	34	31	47	45	34	45	54	42	40.8
	Minimum	20	18	10	13	10	28	32	31	22	24	31	25	35	25	35	42	29	26	31	36	26	29	31	28	19	19	34	25	21	23	29	26.0
Calhoun	Maximum	58	29	26	26	32	33	39	37	33	35	38	43	44	39	48	47	42	29	55	64	61	32	34	34	31	49	45	40	47	58	54	41.4
	Minimum	18	14	7	12	7	22	31	32	25	24	27	21	35	26	29	37	25	18	26	31	26	27	30	25	18	19	36	28	22	29	30	24.4
Earlington	Maximum	46	28	31	26	35	34	42	37	35	37	40	46	57	38	52	50	38	31	60	69	64	33	38	35	35	55	46	43	54	51	49	43.1
	Minimum	21	15	8	13	7	21	34	34	27	25	29	21	35	25	29	38	25	22	27	36	28	29	33	27	21	20	39	29	21	27	29	25.6
Greenville	Maximum	61	30	30	30	35	34	43	38	35	37	40	43	48	40	50	50	48	31	61	68	71	38	46	38	33	50	50	45	44	59	55	44.5
	Minimum	20	13	5	12	12	22	32	33	26	24	27	20	34	23	27	41	26	21	24	37	29	29	32	26	20	18	38	29	22	27	31	25.2
Hopkinsville	Maximum	60	34	35	33	35	34	43	41	36	37	43	45	48	43	52	52	49	34	65	67	64	37	47	47	36	52	47	47	49	61	54	46.0
	Minimum	21	15	8	14	11	24	31	34	24	24	28	21	31	20	28	42	31	22	26	42	29	29	32	26	22	25	40	30	29	24	32	26.3
Marion	Maximum	48	30	32	28	33	32	39	36	33	35	37	42	44	41	48	51	44	30	56	67	63	44	33	33	30	50	48	40	39	55	40	41.3
	Minimum	28	17	10	10	10	25	31	32	24	23	29	25	35	26	32	41	26	20	26	33	26	27	30	28	18	18	40	30	21	30	25	25.7
Mayfield §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro	Maximum	39	28	25	22	32	37	39	36	34	33	36	41	43	35	43	46	39	28	53	60	40	35	34	32	31	45	43	39	46	54	41	38.4
	Minimum	28	13	9	10	10	25	33	32	27	25	27	25	28	29	30	35	20	18	22	30	32	32	32	31	18	20	33	28	25	29	31	25.4
Paducah (Lone Oak)	Maximum	56	28	32	29	31	32	32	33	35	34	34	36	43	42	38	52	51	40	51	65	38	34	35	36	28	43	44	43	42	50	48	39.8
	Minimum	13	18	10	10	10	23	31	32	28	25	27	32	33	25	29	36	33	25	31	36	25	28	31	26	18	20	25	27	23	30	28	25.4
Princeton §§	Maximum	26	28	34	22	33	38	44	34	..	34	37	..	47	41	49	..	48	33	59	..	52	..	36	30	30	47	43	31	44	..	..	f38.3
	Minimum	20	16	9	11	11	21	28	34	25	..	33	22	..	25	35	45	..	22	23	42	..	31	..	30	21	20	38	31	24	26	..	f25.7
Russellville §§	Maximum	27	31	32	24	34	41	42	39	30	39	42	43	48	41	47	51	32	40	63	67	33	40	52	29	40	52	45	39	46	59	43	41.6
	Minimum	24	14	6	7	10	19	32	36	29	27	27	27	34	25	28	36	31	23	23	40	31	31	32	28	22	22	39	33	24	26	30	26.3
Central Division.																																	
Alpha	Maximum	52	30	24	26	29	40	50	53	58	37	43	41	44	36	39	52	47	36	60	64	60	40	63	62	46	36	50	44	42	52	41	45.1
	Minimum	30	22	9	20	5	31	44	46	37	28	33	23	32	28	27	44	36	24	42	41	38	38	42	41	30	27	41	40	31	29	36	32.1
Anchorage	Maximum	44	22	15	22	28	37	42	37	34	36	39	41	43	41	43	45	35	25	53	64	58	32	34	33	26	46	45	38	48	56	41	38.8
	Minimum	17	8	0	−4	−5	11	25	32	26	23	24	16	29	24	22	32	20	13	23	28	26	25	28	23	14	16	28	27	20	25	26	20.1
Bardstown	Maximum	50	27	23	21	31	40	43	43	38	41	42	50	48	35	45	48	38	28	58	62	60	34	38	40	26	52	47	46	52	62	52	42.6
	Minimum	21	11	4	5	0	11	30	34	28	26	27	20	32	25	28	32	26	18	26	36	30	27	31	26	18	17	32	31	22	32	37	24.0
Bowling Green	Maximum	61	35	27	27	35	40	44	47	44	41	38	46	49	41	52	51	49	53	63	66	63	36	55	55	30	54	49	48	40	60	52	46.8
	Minimum	18	15	7	14	7	27	38	37	28	26	29	24	32	25	27	41	27	23	28	40	32	31	35	29	22	23	40	33	24	27	33	27.2
Eubank	Maximum	60	26	21	17	18	35	45	49	58	40	40	40	45	40	46	49	40	28	50	63	63	45	35	61	40	43	45	45	52	58	53	43.5
	Minimum	22	10	3	8	8	16	25	35	38	25	26	18	33	21	29	40	24	18	25	39	31	30	30	26	20	21	31	30	23	28	30	24.6
Frankfort	Maximum	56	24	18	21	25	37	43	42	38	37	39	39	43	41	44	48	48	27	54	63	63	33	36	37	27	46	47	46	45	55	53	41.1
	Minimum	22	14	2	7	0	12	33	35	29	26	28	23	33	26	26	30	24	17	26	31	29	28	31	25	18	20	31	29	23	28	29	23.8
Franklin	Maximum	60	34	30	28	35	35	44	43	54	41	43	45	50	43	52	51	46	29	66	67	64	36	57	50	31	52	50	46	48	61	48	46.4
	Minimum	22	15	8	15	10	22	35	37	27	25	31	23	34	25	30	42	28	23	26	45	32	31	35	29	22	23	41	32	25	34	32	27.7
Greensburg	Maximum	59	28	25	22	31	39	45	44	51	41	41	43	47	41	48	50	50	28	59	65	65	35	57	58	29	49	48	47	52	58	53	45.4
	Minimum	23	11	4	9	3	13	32	36	27	24	25	18	30	23	24	34	25	19	21	37	30	28	32	26	20	20	32	30	25	25	29	23.7
Irvington	Maximum	49	24	22	21	30	37	42	39	35	36	39	40	43	34	44	48	38	28	54	65	63	33	37	37	27	48	46	40	46	55	47	40.2
	Minimum	18	14	6	9	6	22	34	35	27	26	28	23	33	27	31	37	22	17	28	32	27	27	30	25	18	20	36	26	26	33	29	24.9
Junction City	Maximum	57	31	19	20	30	31	43	48	41	41	40	40	46	45	47	48	50	27	58	63	66	42	58	55	27	48	44	43	52	60	58	44.6
	Minimum	24	9	1	5	5	9	32	35	28	21	28	20	31	26	29	31	23	18	27	34	28	27	31	25	19	19	28	29	22	27	30	23.4
Leitchfield	Maximum	55	23	24	24	31	36	42	39	36	36	39	41	44	38	45	48	40	28	57	62	58	33	49	44	30	50	46	43	47	56	50	41.7
	Minimum	20	13	6	10	7	18	29	33	27	25	26	20	33	26	27	35	23	19	23	35	28	28	32	25	19	20	34	30	24	28	31	24.3
Lexington	Maximum	40	20	15	17	26	36	43	40	45	37	35	38	41	28	42	47	33	27	52	61	44	31	45	33	23	46	45	28	46	54	37	37.6
	Minimum	13	3	2	6	10	20	35	32	26	25	27	24	28	24	27	33	18	15	27	29	26	26	31	18	14	20	36	24	22	32	28	22.6
Louisville	Maximum	35	22	17	20	27	37	41	37	35	35	39	40	43	31	42	47	33	28	52	64	33	32	35	32	29	43	46	36	46	56	29	37.2
	Minimum	16	6	5	8	7	20	33	34	27	24	28	25	30	26	31	33	18	15	26	31	25	27	31	22	17	20	35	26	26	36	29	23.8
Do. (Cherokee Park)	Maximum	56	22	16	19	25	37	41	40	34	36	37	40	42	39	42	46	41	26	52	63	61	31	33	33	27	41	45	44	44	53	53	39.4
	Minimum	20	14	8	6	−1	15	32	33	28	25	28	21	34	27	26	34	23	15	25	30	26	26	30	25	17	17	30	27	21	29	28	23.2
St. John	Maximum	57	33	20	21	27	35	41	40	35	35	40	40	49	40	40	47	28	26	57	62	60	32	40	38	28	40	45	40	46	49	60	40.7
	Minimum	21	12	3	8	4	17	32	34	27	24	25	20	34	24	26	27	22	18	24	33	27	27	38	25	18	32	32	32	28	33	23	24.2
Scott	Maximum	49	19	11	20	26	35	39	38	32	33	31	37	38	32	38	43	40	20	47	60	57	27	32	32	22	39	44	40	44	54	46	36.3
	Minimum	17	8	−4	4	1	14	30	32	25	23	26	16	31	16	21	29	20	8	17	21	25	22	25	21	12	15	30	24	18	31	19	19.3
Shelbyville	Maximum	50	22	15	23	29	34	40	40	34	36	32	40	44	35	39	45	44	26	45	58	57	32	34	43	30	48	42	42	47	45	48	38.7
	Minimum	20	9	0	1	−5	14	29	31	24	22	23	17	29	22	24	30	19	12	21	24	26	25	27	21	13	15	29	25	19	28	25	19.9
Taylorsville	Maximum	55	24	18	20	26	37	41	40	36	37	38	39	44	38	44	47	47	27	54	62	60	32	35	36	27	45	44	42	43	56	48	40.1
	Minimum	20	12	3	5	−3	10	31	34	28	25	25	19	31	25	24	31	23	17	24	31	28	26	31	24	17	18	28	28	21	25	29	22.3
Williamstown	Maximum	56	46	36	32	30	36	40	38	34	37	36	40	43	34	42	44	44	38	50	61	59	47	33	34	27	43	48	43	47	57	55	42.1
	Minimum	16	8	−4	2	3	14	30	33	26	23	27	18	31	18	22	32	20	10	19	25	24	24	27	22	14	16	31	26	19	34	23	20.4
Eastern Division.																																	
Beattyville	Maximum	57	26	21	19	29	35	45	48	55	48	43	46	49	44	50	48	50	50	63	66	64	34	67	67	58	42	41	41	55	66	42	47.4
	Minimum	24	9	−2	10	6	6	32	38	31	28	24	18	23	23	26	32	20	20	22	35	34	30	33	33	22	21	28	34	21	23	28	23.2
Berea	Maximum	58	20	21	22	27	35	47	48	39	46	43	47	47	36	47	49	43	36	59	64	57	32	60	50	44	48	44	42	53	60	43	44.1
	Minimum	19	10	−2	5	−4	13	34	35	19	30	29	25	31	20	25	40	22	18	26	36	31	29	22	24	19	21	29	32	21	33	30	23.6
Farmers	Maximum	54	25	19	20	31	38	45	40	50	42	38	44	45	36	45	48	48	35	55	64	63	32	40	42	27	44	47	43	42	58	42	42.0
	Minimum	24	15	5	10	12	15	30	25	20	20	34	17	22	25	24	30	21	18	34	30	31	26	31	25	18	20	23	30	27	22	29	23.0
Harlan	Maximum	59	30	32	21	33	58	..	..	64	47	42	45	44	40	54	50	50	30	50	72	65	62	66	61	37	50	53	55	50	55	50	h49.1
	Minimum	27	15	4	13	5	21	..	..	33	29	26	22	25	24	28	35	28	21	28	47	42	39	49	37	28	30	40	38	30	34	28	h28.5
Maysville	Maximum	56	24	17	20	26	39	43	40	40	36	37	38	43	36	40	46	45	27	52	62	62	34	36	35	29	43	47	41	45	56	42	39.9
	Minimum	23	10	2	8	5	13	32	35	34	27	26	22	31	21	24	32	25	14	22	28	28	26	30	25	15	19	29	29	29	28	27	23.1
Middlesboro	Maximum	58	28	27	26	29	28	40	44	46	42	40	43	45	44	51	50	53	32	57	62	64	63	64	62	37	49	51	50	59	58	55	47.0
	Minimum	28	14	6	14	1	21	22	20	24	24	21	21	27	23	26	27	29	22	27	44	42	38	49	36	28	31	41	39	24	25	26	26.5
Mount Sterling	Maximum	54	38	17	16	25	36	45	40	52	37	37	39	42	32	42	50	35	25	55	61	58	32	45	43	24	47	41	41	47	55	42	40.4
	Minimum	18	10	−1	3	−2	11	34	34	30	26	26	21	28	24	23	32	21	16	24	30	28	26	31	23	16	29	19	26	20	29	29	22.1
Richmond	Maximum	59	27	21	21	29	37	45	44	40	40	38	41	46	39	44	48	50	28	58	62	35	34	56	32	28	43	44	35	49	58	35	40.8
	Minimum	24	13	0	6	0	15	34	36	28	26	29	22	32	25	27	37	24	18	26	34	34	28	32	26	19	21	32	30	23	35	30	24.7
Williamsburg	Maximum	67	32	8	24	35	38	48	58	66	46	44	44	47	43	55	55	53	31	66	68	68	45	68	64	41	44	48	49	54	62	58	50.0
	Minimum	26	13	27	12	1	14	34	43	31	28	25	22	25	26	28	37	28	21	28	38	38	34	42	33	28	29	36	38	25	29	26	27.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost **always occurs.**

ᵃ ᵇ ᶜ etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, January, 1920.



Based on 700 records.

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

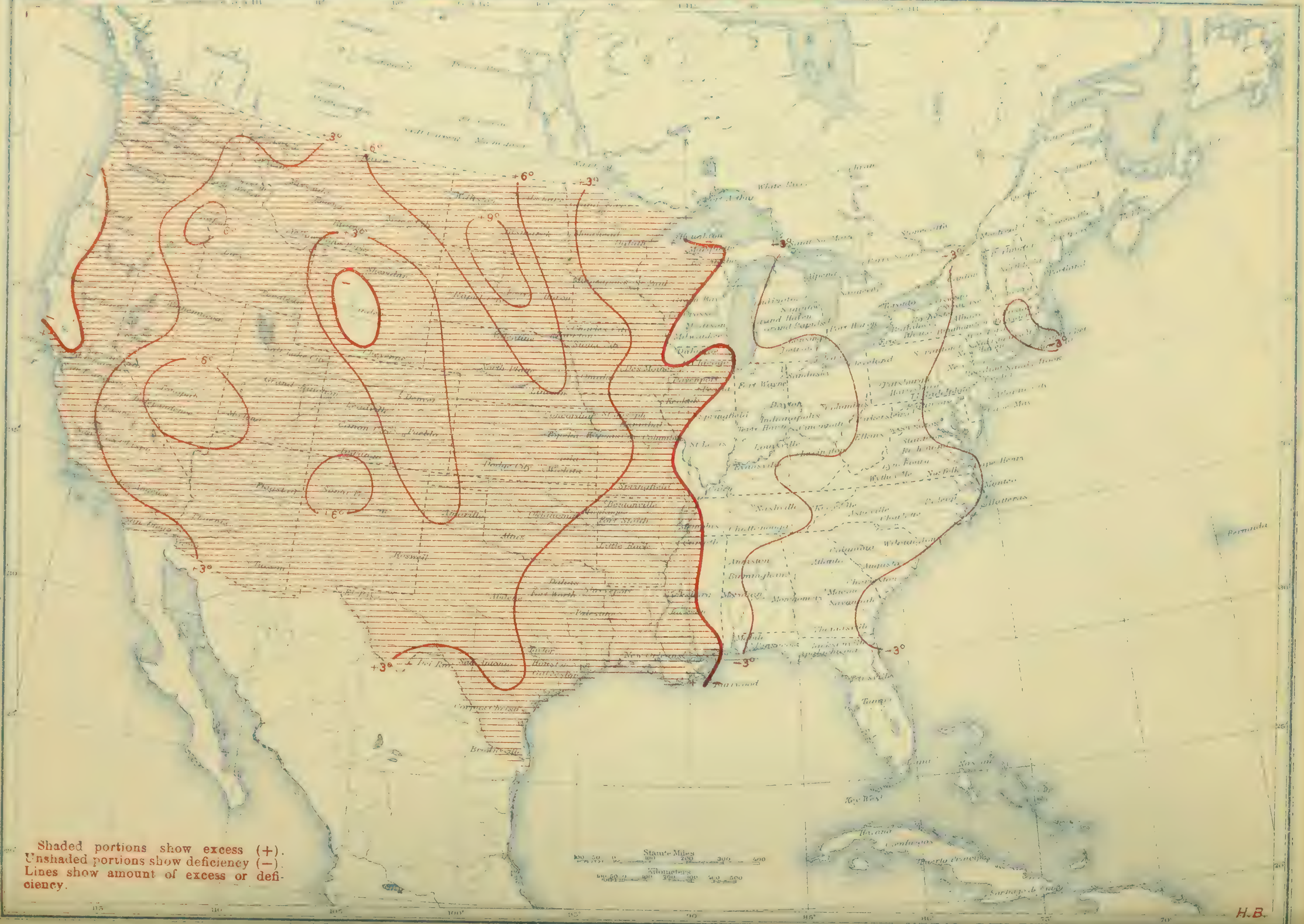
KENTUCKY SECTION

FEBRUARY, 1920

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
APRIL 6, 1920

Departure of the Mean Temperature from the Normal, February, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
KENTUCKY SECTION.
F. J. WALZ, Professor and Section Director.
Vol. XXV. Louisville, Ky., February, 1920. No. 2

GENERAL SUMMARY.

Although the temperature averaged near normal, and precipitation much below normal, weather conditions during February were generally unfavorable for clover, meadows, pastures, and winter grains, because of the frequent heavy freezes and the lack of heavy snow covering. The weather was generally favorable for outdoor work, and considerable progress was made with plowing and seeding. Some of the wheat that was sown in the preceding November came up during the period of mild temperature near the beginning of the month. Many tobacco plant beds were sown during the warm weather. Minimum temperatures near zero occurred on the 15-16th, and the last five days were also abnormally cold; this severe weather causing some loss of young livestock and interfering with plowing. Snowfall averaged about 1.0 inch on the 14th, and about 2.5 inches on the 29th. In the eastern counties, where the amount was largest, grain was protected for a few days; but over the rest of the State the effect was negligible. The freezing and thawing caused progressive injury to winter wheat, as in January preceding; this crop continuing to deteriorate, until at the end of the month its condition was decidedly unpromising in most districts.

PRESSURE.

High pressure areas dominated weather conditions most of the time during the first three weeks. Low pressure areas were generally shallow, the most important being as follows: 3d-4th, a well-developed disturbance moved up the Atlantic coast causing rains over the eastern and central counties; 9-10th shallow troughs attended by light to moderate rains moved across the State; 20th-22d, a well-developed "low" moved from the southwest across to the southward of the State, attended by moderate rains in the northern and heavy rains in the southern counties; 28-29th, a shallow trough moved across the State causing light to moderate precipitation.

The mean sea-level pressure, based on the records of two stations, was 30.11 inches. The extremes were 30.53 inches on the 2d at Lexington, and 29.72 inches on the 17th at Louisville.

TEMPERATURE.

The average temperature for the month, 38 stations reporting, was 35.7°, which is 0.1° above normal. Minimum temperatures ranging from 0° to 15° were registered in the period 15-16th, and from 6° to 20° in the period 26-27th; otherwise minima were generally near freezing. Maximum temperatures ranged from 50° to 60° on the 1st-2d, 11th, 13th, and 20th-23d. The extremes were 71° on the 2d at Earlington, and zero on the 16th at several stations in the eastern counties.

PRECIPITATION.

Precipitation for the State, determined from the reports of 54 stations, averaged 2.27 inches, which is 1.33 inches less than normal. Except on the 21st-22d, when 24-hour amounts ranging from 1.00 to 2.00 inches occurred at several stations, the distribution throughout the month was in light to moderate showers at frequent intervals. The principal rain periods were: 4th; in central and eastern counties; 9-10th; 14th; 21st-22d, and 29th. Amounts at the various stations ranged between 0.79 inch at Jackson and Louisville and 4.92 inches at Franklin. From monthly totals near 1.00 inch along the Ohio River precipitation increased toward the south and east, reaching normal amounts over the southern border counties. It was much below normal over most of the agricultural district, a decidedly favorable condition because of the large excess of moisture received during the previous months.

WIND.

The total wind movement at Louisville was 9,090 miles, and at Lexington 9,516 miles, with average hourly velocities of 13.1 and 13.7 miles, respectively. The maximum velocity for five minutes was at the rate of 39 miles per hour at Louisville and 40 miles per hour at Lexington from the southwest on the 17th at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 78 per cent, at 12 noon 65 per cent, and at 7 p. m. 68 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 40 and at Lexington 31.

MISCELLANEOUS

Rivers.—The Ohio was falling rapidly in the upper and middle reaches when the month began, the decline extending to the lower river by the 3d. The river continued above flood stage at Evansville until the 3d. After this tide had subsided moderate stages prevailed during the remainder of the month.

COMPARATIVE DATA FOR FEBRUARY.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more.
1889	34.1	− 1.5	74	3	1.91	−1.69	..
1890	45.6	+10.0	86	16	7.98	+4.38	..
1891	42.2	+ 6.6	76	0	4.72	+1.12	..
1892	42.2	+ 6.6	70	11	2.92	−0.68	..
1893	37.7	+ 2.1	70	3	4.40	+0.80	
1894	34.6	− 1.0	74	2	4.66	+1.06	
1895	25.9	− 9.7	80	−18	0.66	−2.94	5
1896	37.4	+ 1.8	81	−12	3.06	−0.54	9
1897	39.8	+ 4.2	76	8	5.75	+2.15	11
1898	37.4	+ 1.8	77	− 3	1.61	−1.99	6
1899	26.2	− 9.4	71	−33	3.97	+0.37	11
1900	32.5	− 3.1	76	− 9	4.68	+1.08	12
1901	32.4	− 3.2	71	1	1.27	−2.33	6
1902	27.9	− 7.7	69	− 3	1.30	−2.30	7
1903	37.5	+ 1.9	75	−16	7.28	+3.68	9
1904	35.2	− 0.4	75	− 2	2.32	−1.28	7
1905	27.9	− 7.7	67	−16	2.44	−1.16	9
1906	34.7	− 0.9	75	−12	1.81	−1.79	7
1907	35.7	+ 0.1	73	−10	3.06	−0.54	9
1908	35.6	0.0	70	2	5.56	+1.96	13
1909	42.4	+ 6.8	75	8	8.17	+4.57	11
1910	32.9	− 2.7	76	−12	4.70	+1.10	10
1911	42.0	+ 6.4	80	11	3.25	−0.35	9
1912	29.7	− 5.9	68	−14	3.08	−0.52	7
1913	34.8	− 0.8	77	− 2	2.94	−0.66	7
1914	32.2	− 3.4	69	− 2	4.14	+0.54	11
1915	41.9	+ 6.3	75	13	1.74	−1.86	8
1916	35.0	− 0.6	72	− 4	2.99	−0.62	9
1917	34.8	− 0.8	80	− 9	3.51	−0.09	8
1918	39.3	+ 3.7	83	− 8	2.04	−1.56	7
1919	38.6	+ 3.0	69	12	1.79	−1.81	9
1920	35.7	+ 0.1	71	0	2.27	−1.33	9

Climatological data for February, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	36.8	+ 1.6	69	2	6	16†	38	1.48	−1.90	0.80	2.4	7	9	14	6	w.	Miss Addie B. Taylor.
Blandville	Ballard,	445	38	38.2	+ 1.8	66	2	8	16	31	2.45	−2.08	0.64	4.7	6	8	9	12	n.	E. W. Horr.
Calhoun	McLean	437	16	36.7	− 0.6	65	2	5	16	34	1.98	−1.42	1.21	5.3	7	4	12	13	nw.	W. A. Taylor.
Earlington	Hopkins	420	29	37.8	+ 1.5	71	2	8	16	39	1.69	−1.91	0.48	3.0	5	11	0	18	n.	Brick Southworth.
Greenville	Muhlenburg	519	3	37.4	......	64	2	5	16	36	2.25	......	0.87	4.0	5	8	7	14	n.	C. R. Lovell.
Henderson	Henderson	327	12	.....	......	......	......	......	......	......	0.89	−1.86	0.45	3.5	6	....	....	....	......	W. W. Shelby.
Hopkinsville	Christian	524	23	39.2	+ 2.2	67	20	6	16	38	2.59	−1.30	0.75	5.0	8	12	8	9	n.	W. E. Graves.
Marion	Crittenden	571	21	37.1	+ 1.4	68	2	7	16	31	1.48	−1.89	0.70	2.5	4	10	3	16	nw.	B. C. Paris.
Mayfield	Graves	364	10	37.6	+ 0.4	66	20	8	16	35	2.33	−1.50	1.00	4.5	4	7	8	14	n.	J. N. Davis.
Owensboro	Daviess	479	23	36.6	+ 1.9	62	2	6	16	28	1.03	−2.22	0.52	2.5	7	10	7	12	nw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	36.2	......	64	3	8	16	28	2.72	......	1.04	7.8	8	14	0	15	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	......	......	......	......	......	......	2.22	−1.39	0.68	2.0	6	....	....	....	......	Frank L. Brown.
Princeton	Caldwell	529	10	.....	......	......	......	......	......	......	.....	......	......	......	....	....	....	....	......	Ray Baker.
Russellville	Logan	590	6	36.2	− 0.4	65	2	6	16	41	2.50	−1.14	1.78	6.0	4	11	4	14	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	.....	......	......	......	......	......	......	.....	......	......	......	....	....	....	....	......	Taylor Davis.
Anchorage	Jefferson	700	19	32.8	+ 0.7	67	2	2	16	38	1.24	−1.90	0.52	2.0	6	9	3	17	nw.	C. E. Barret.
Bardstown	Nelson	637	23	36.2	+ 1.7	67	2	3	16	32	3.18	−0.73	1.10	5.7	11	15	6	8	w.	Chas. M. Talbott.
Bowling Green	Warren	500	29	39.2	+ 1.6	67	2	7	16	36	2.85	−1.82	0.75	5.3	9	7	8	14	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	......	......	......	......	......	......	2.71	......	0.75	6.0	11	....	....	....	......	James H. Young.
Burnside	Pulaski	773	27	.....	......	......	......	......	......	......	4.80	+0.54	2.10	3.0	11	....	....	....	......	F. E. Bradshaw.
Carrollton (Lock No.1)	Carroll	492	21	.....	......	......	......	......	......	......	1.21	−1.67	0.53	......	13	....	....	....	......	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	......	......	......	......	......	......	1.03	......	0.35	5.2	9	....	....	....	......	W. A. Cockerill.
Eubank	Pulaski	1177	25	35.4	+ 2.1	64	2	0	16	31	3.73	−0.36	1.25	6.0	8	5	3	21	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	35.4	+ 0.6	63	2	4	16	32	1.84	−1.72	0.36	1.5	12	9	1	19	w.	Mrs. Amelia Wood
Franklin	Simpson	691	24	38.4	− 0.2	66	2	7	16	34	4.92	+0.03	1.40	6.0	8	5	1	23	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	27	36.4	+ 2.7	66	2	4	16	38	3.38	−0.64	1.33	4.7	11	6	4	19	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	......	......	......	......	......	......	2.62	−0.84	0.56	3.0	11	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	22	35.6	+ 1.3	64	2	5	16	29	1.21	−2.12	0.74	2.0	5	10	3	16	nw.	W. J. Piggott.
Junction City	Boyle	985	26	35.6	+ 2.5	66	2	4	16	33	4.07	+0.44	1.30	7.0	15	10	6	13	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	35.2	+ 1.2	64	2	5	16	31	2.11	−1.67	1.12	4.0	7	7	8	14	nw.	John E. Stone.
Lexington	Fayette	959	32	32.6	− 3.1	62	2	2	16	28	2.11	−1.23	0.77	4.1	11	6	4	19	nw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	34.2	− 2.6	61	2	4	16	30	0.79	−3.05	0.44	4.4	5	7	5	17	nw.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	10	34.6	− 0.6	61	2	4	16	32	1.15	−1.81	0.54	1.1	7	7	6	16	nw.	Wm. I. Hunt.
St. John	Hardin	777	23	35.6	+ 2.6	65	2	7	16	30	2.24	−1.74	1.01	3.5	5	14	4	11	......	Sisters of Loretto.
Scott¶	Kenton	900	22	31.4	+ 0.7	64	2	0	16	34	1.81	−0.94	0.83	3.6	9	5	8	16	nw.	E. B. Wilson.
Shelbyville	Shelby	825	31	32.7	− 1.1	66	2	1	16	31	1.43	−2.37	0.58	2.4	5	7	6	16	n.	F. A. Miller.
Taylorsville	Spencer	489	17	34.0	− 0.4	63	2	4	16	34	2.03	−1.74	0.64	2.6	13	7	1	21	nw.	E. D. Bourne.
Williamstown	Grant	943	17	33.8	+ 2.8	69	2	0	16	33	0.80	−2.17	0.37	3.8	8	4	7	18	......	Miss Rose Carter.
Woodbury	Butler	533	2	.....	......	......	......	......	......	......	2.34	......	0.89	3.5	9	....	....	....	......	J. C. Stinson.
Eastern Division.																				
Beattyville	Lee	650	16	36.8	+ 2.3	69	1†	5	27	47	2.43	−1.67	1.37	4.0	12	4	6	19	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	35.2	− 0.6	67	2	3	16	34	2.99	−0.18	1.12	7.0	9	8	1	20	sw.	Prof. Chas. D. Lewis.
Catlettsburg‡	Boyd	534	13	35.4	+ 2.4	59	3	7	16	37	1.83	−1.68	0.51	3.3	12	8	3	18	w.	Forester Farley.
Cynthiana	Harrison	684	2	.....	......	......	......	......	......	......	1.70	......	0.65	2.0	7	....	....	....	......	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	......	......	......	......	......	......	1.58	−1.78	0.52	......	9	5	5	19	sw.	J. V. Oldham.
Farmers	Rowan	668	12	33.1	− 2.5	56	3	4	16	37	1.91	−1.09	0.58	1.5	8	11	11	7	w.	Miss Margaret Carter.
Harlan	Harlan	1197	2	.....	......	......	......	......	......	......	.....	......	......	......	....	....	....	....	......	Will Ward Duffield.
Jackson	Breathitt	776	8	.....	......	......	......	......	......	......	0.79	−2.51	0.40	2.7	5	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	5	.....	......	......	......	......	......	......	3.91	......	1.75	4.5	11	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	16	.....	......	......	......	......	......	......	1.99	−1.69	0.49	3.5	12	....	....	....	......	Miss Carrie S. Adams.
Maysville	Mason	524	22	34.2	− 1.2	63	2	4	16	32	1.85	−1.48	0.50	2.0	7	9	1	19	n.	Harry M. Robinson.
Middlesboro	Bell	1128	21	37.3	− 1.6	65	2	7	16	37	4.43	−0.49	1.12	3.0	9	10	5	14	......	B. H. Perkins.
Mount Sterling	Montgomery	930	30	32.8	− 0.6	62	2	0	16	31	1.74	−2.25	0.60	......	13	11	1	17	nw.	W. R. McKee.
Oliver	Greenup	......	0	.....	......	......	......	......	......	......	2.60	......	0.53	4.6	12	....	....	....	......	Percy Humphrey.
Pikeville	Pike	634	14	.....	......	......	......	......	......	......	3.00	−0.28	0.62	1.0	8	....	....	....	......	I. M. Williams.
Richmond	Madison	926	25	34.6	− 0.7	67	2	1	16	32	2.42	−1.02	1.00	5.4	12	8	0	21	......	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	......	......	......	......	......	......	1.48	......	0.65	2.5	7	....	....	....	......	Samuel Johnson.
Williamsburg	Whitley	939	22	38.2	− 0.7	68	2†	7	16	36	4.74	+1.25	1.68	5.0	13	4	13	12	nw.	D. B. Bradley.
State averages and extremes			...	35.7	......	71	2	0	16	47	2.27	......	2.10	3.8	9	3	5	16	nw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ᵃ, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

‡Post-office address. Normal, Ky.; ‡‡Nerinx, Ky.; ¶ Covington, Ky.

Daily Precipitation for February, 1920.

Stations.	Day of month																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam G.														.14							.80	.05				.09	.06	.04	.30			1.48
Blandville M.									.61					.32							.40	.43	.03	T.		T		.63				[illegible]
Calhoun G.			T.			T.	T.		.02	.36				.12	T.			T.		T.	1.21		T.	.13	T.	.04		T	.16			[illegible]
Earlington G.										.43				.04	T.			T.			.48	.45		T.	T.	T.			.29			1.69
Greenville G.										.63				.16							.87	.19							.40			2.25
Henderson ‖ O.										.12				.15							.45			.02		.07			.08			0.89
Hopkinsville C.									.07	.49				.14					T.		.75	.81	.02	T.	T.	T.		.01	.30			2.59
Marion O.									.40												.70	.26		T.	T.	T.			.12			1.48
Mayfield ‡ M.										.80				.05								1.00		T.					.48			2.33
Owensboro O.						T.			.12	.08				.05							.52			.05	.10			T.	.11			1.03
Paducah (Lone Oak) O.									.50	.30				.19							.21	1.04		.03	T.	T.		.39	.06			2.72
Paducah O.										.66				.24							.10	.68	.08	T.					.46			2.22
Princeton ‖ G.										.33				.10																		
Russellville ‖ G.				T.		T.				.40				.02	T.	T.	T.				T.	1.78	T.	T	T		T		.30			2.50
Central Division.																																
Alpha C.																																
Anchorage O.				.31			T		.09	.10				.10				T.		T.	.52			T.	T.				.12			1.24
Bardstown S.				.60			.05		.08	.45				.20				.20			1.10			.20	.05	.05			.20			3.18
Bowling Green G.			T.	.40					T.	.10				.20				T.			.75	.70	.05	.10	T.	.10			.45			2.85
Brownsville ‖ G.				.44	.04		.01			.56				T.	.06		T.	.03			.36	.75	.03	T.	T.	.06	T.		.37			2.71
Burnside ‖ C.				1.24	.16	T.				.33			.08		.16				.30		.12	2.10	.05	T.	.08				.18			4.80
Carrollton ‖ (Lock No. 1) O.				.07	.14		.02			.18					.07			.02	.01		.53	.06	T.		.03	.02	.03		.03			1.21
Cloverport ‖ O.					T.					.22				.08	.02			T.			.09	.13		.05	.04	.05	T.		.35			1.03
Eubank ‖ C.				1.25						.32					.10						.57	1.04			.03	.10			.32			3.73
Frankfort ‖ K.				.47	.03			T.		.29			T.	.01	.11			.08	.02		.36	.29	.01		.03	T.	T.		.14			1.84
Franklin G.									.57	.48				1.00				T.	T.		.82	1.40	T.	.10	T.	.15			.40			4.92
Greensburg G.				.60			.03		T.	.46				.18				.10			1.33	.08	.08	.10	T.	T.		.03	.39			3.38
High Bridge ‖ K.				.50	.05					.46					.12	T.		.08	.06		.56	.50		.02	.07				.20			2.62
Irvington O.				.04		T.			.23					.10				T.	T.		.74	T.		T.	T.	T.		T.	.10			1.21
Junction City K.				.70			.06		.40	.02				.17			.22		.03	1.30		.15	.14	.15	.05	.05		.08	.55			4.07
Leitchfield G.				.18					.41					.10				T.			1.12			.03		.07		T.	.20			2.11
Lexington *** K.				.30			T.		.24	.03		T.		.12				.19		T.	.77		.09	.08	.02	.02		.25	T.			2.11
Louisville*** O.				.12			T.		.17			T.		.03	T.			T.	T.	T	.44	T.		T.	T.	T.		.03				0.79
Do. (Cherokee Park) O.				.18			T.			.21				.12				.03		.02	.54	T.		T.					.05			1.15
St. John S.				.30						.50				.15				T.			1.01			T.	T.		T.	T.	.28			2.24
Scott L.				.48			.08		.03	.30				.05				T.	T.	T.	.83		.02	T.	.01	.01		T.	T.			1.81
Shelbyville S.				.44					T.	.17				.12							.58			T.	T.	T.			.12			1.43
Taylorsville S.			.01	.49			.02		.01	.40				.14	T.			.15	T.	.01	.64		T.	T.	.01	.01		.01	.13			2.03
Williamstown L.			T.	.37			.03			.07				.11				.03			.10			.02					.07			0.80
Woodbury ‖ G.				.09	.02					.56				T.	.10			.02			.39	.89		T.	T.	.04			.23			2.34
Eastern Division.																																
Beattyville ‡‖ K.				T.	T.		.03	T.		.22			.06		.10				.04		.02	1.37	.02		.06	.05	.04	T.	.42			2.43
Berea K.				.68					.09	.17				.14				.12			1.12			.12	.05	T.		T.	.50			2.99
Catlettsburg ‖ B.				.27			.02	T.	T.	.20		.02	.06	.11				.27			.51	.10		.08	T.			.05	.14			1.83
Cynthiana ‖ L.			T.	.20	.10	T.				.15				T.	.10	T.	T.	T.			.65	.30			T.	T.	T.		.20			1.70
Falmouth ‡‖ L.				.40	T.		.05	T.		.31				T.	.10			.05	T.		.52	.05			.02	T.	T.		.08			1.58
Farmers L.				.20									.27					.30	T.		.58	.09	.08	.11	T.	T.	T.	T.	.28			1.91
Harlan K.																																....
Jackson ‖ K.				T.		T.	T.			.40			.12		T.				.10			.15			T.	T.	T.		.02			0.79
London ‡ C.				.80	.10		.05			.30					.18				.06			1.75	.10	.07	.10				.40			3.91
Louisa ‖ B.				.09	T.		.05	.04		.19			.18		.07			T.	.13	T.	.10	.49	.13	T.	.12	T.	T.		.40			1.99
Maysville ‡‖ O.				.13	T.		.10			.35				T.	.16			T.	T.		.50	.33	T.		T.	T.			.28			1.85
Middlesboro C.			.84	.58						.24					.05					1.04	1.12	.23	.03	.20					.10			4.43
Mount Sterling L.							.04		.02	.34		T.			.23			.15		.02	.60	.06		.09	.02	.01		.04	.12			1.74
Oliver ‖ O.				.22	T.		.06			.16					.53			.32	.05		.40	.44	.06	T.	.13	.04	T.		.19			2.60
Pikeville ‖ B.				.54	T.					.44			.74		T.				.18	T.		.62	.18	T.	.12	T.			.18			3.00
Richmond K.				.03			.02		T.	.35				.20		.12				T.	1.00	.31	.03	.07	T.	.03		.03	.23			2.42
Vanceburg ‖ O.			.14			.06								T.	T.		T.	.12	.05		.65	.21			T.	T.			.25			1.48
Williamsburg ‖ C.				1.40	.18		T.	.04		.24			.11		.20			T.	.18			1.68	.02	.17	.12		.02		.38			4.74

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the **time of** observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

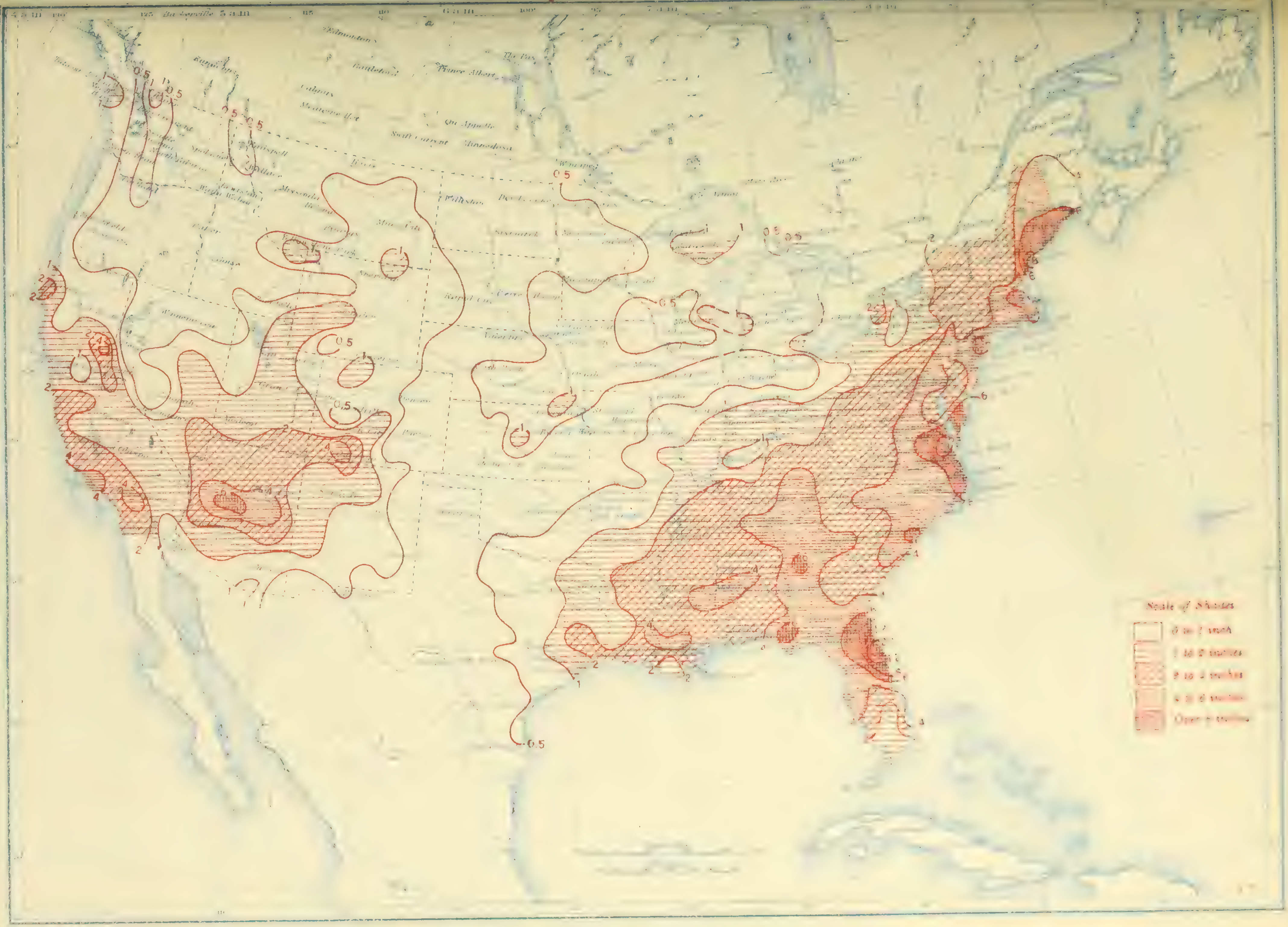
River drainage area in which station **is** located is indicated as follows: **(B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.**

Daily temperatures for February, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	62	69	58	53	43	45	46	52	53	53	59	51	56	49	26	28	50	50	48	61	56	54	50	40	34	27	36	43	34	..	..	48.1
	Minimum	25	31	43	35	34	27	26	30	30	28	27	32	22	23	10	6	16	25	28	25	42	42	28	23	25	13	6	25	20	..	..	25.8
Blandville	Maximum	53	66	55	46	39	42	43	48	52	52	57	45	56	50	24	28	50	51	49	65	63	49	47	48	32	26	35	45	29	..	..	46.4
	Minimum	26	39	46	34	32	33	36	36	39	30	36	33	28	21	10	8	25	32	33	34	49	40	37	27	25	19	14	29	16	..	..	29.9
Calhoun	Maximum	60	65	57	48	39	42	40	49	49	51	58	54	56	52	24	26	49	47	47	59	56	57	53	37	29	25	35	41	34	..	..	46.2
	Minimum	26	36	46	33	31	29	33	33	33	29	29	31	22	22	8	5	21	35	28	27	40	39	36	26	24	16	10	29	13	..	..	27.2
Earlington	Maximum	64	71	56	46	39	45	41	54	51	53	60	49	59	48	24	29	51	49	47	63	59	53	45	36	35	26	37	44	31	..	..	47.1
	Minimum	25	32	44	35	34	28	35	35	34	31	30	33	23	23	10	8	24	36	30	27	44	42	36	28	15	21	12	31	17	..	..	28.4
Greenville	Maximum	61	64	59	51	40	44	42	49	50	51	58	53	55	55	28	26	50	50	47	62	58	56	50	37	31	26	34	44	34	..	..	47.1
	Minimum	25	34	46	33	32	27	33	33	31	29	29	32	21	22	9	5	21	35	29	26	43	41	37	26	24	19	12	28	19	..	..	27.6
Hopkinsville	Maximum	63	66	61	54	41	41	41	52	49	54	59	52	59	51	29	31	51	51	51	67	61	55	51	40	34	28	39	44	33	..	..	48.6
	Minimum	27	33	47	31	33	32	35	37	34	31	29	37	27	24	10	6	22	33	32	29	52	42	37	29	25	20	20	27	19	..	..	29.7
Marion	Maximum	58	68	56	39	38	41	41	50	49	50	56	54	52	51	25	27	45	49	48	59	60	55	46	47	29	27	32	40	40	..	..	45.9
	Minimum	27	39	33	33	32	30	34	35	36	29	33	32	25	25	8	7	22	34	31	31	42	39	36	26	24	20	13	29	16	..	..	28.3
Mayfield §§	Maximum	58	65	60	43	41	42	43	51	52	53	56	47	55	32	24	37	49	42	52	66	58	50	45	30	30	27	38	44	..	..	..	[a]46.1
	Minimum	27	34	47	34	33	32	35	28	33	30	36	33	27	23	13	8	14	35	32	34	43	42	41	28	27	22	14	22	17	..	..	29.1
Owensboro	Maximum	56	62	56	46	40	42	38	48	47	49	57	40	56	53	23	24	45	51	42	57	52	55	54	38	30	34	39	40	25	..	..	44.8
	Minimum	28	35	46	33	33	29	34	34	32	35	31	33	24	22	7	6	22	34	28	28	40	40	36	27	25	9	26	25	19	..	..	28.3
Paducah (Lone Oak)	Maximum	52	60	64	50	39	38	39	46	49	50	56	50	49	48	27	25	41	48	44	52	55	48	49	48	33	24	34	34	32	..	..	44.3
	Minimum	27	38	42	36	32	32	23	30	35	30	33	32	27	20	11	8	25	25	33	32	35	32	33	26	22	20	14	30	18	..	..	28.0
Princeton §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	62	65	54	40	38	44	39	50	49	51	55	44	55	29	22	27	48	49	58	63	57	51	47	35	31	24	34	45	26	..	..	44.6
	Minimum	27	36	47	36	34	33	34	34	33	32	31	33	24	25	12	6	13	27	32	22	27	45	43	30	24	21	12	15	18	..	..	27.8
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	59	67	51	39	35	36	35	41	49	48	52	42	51	41	19	24	42	42	39	51	46	52	45	35	27	25	32	42	31	..	..	41.3
	Minimum	21	30	37	32	30	25	31	31	25	25	23	30	20	17	4	2	19	31	27	22	36	36	35	25	20	16	11	23	18	..	..	24.2
Bardstown	Maximum	61	67	58	46	38	41	40	45	47	51	57	50	53	47	28	26	48	47	43	55	53	52	52	45	30	28	33	42	35	..	..	45.4
	Minimum	35	35	44	33	28	28	33	27	30	30	27	30	23	25	8	3	19	37	27	25	40	39	43	28	24	11	11	26	12	..	..	26.9
Bowling Green	Maximum	64	67	57	51	39	45	43	47	48	52	57	49	57	48	30	27	51	57	48	61	58	58	57	41	31	27	36	45	42	..	..	48.0
	Minimum	28	37	48	37	33	34	35	35	39	33	31	37	25	25	12	7	20	39	30	38	40	45	41	29	27	22	10	27	19	..	..	30.4
Eubank	Maximum	60	64	56	49	37	36	37	40	46	47	50	43	50	45	28	21	42	44	40	55	51	54	51	48	30	24	30	43	35	..	..	43.3
	Minimum	29	33	44	34	31	26	32	32	27	32	36	33	27	22	8	0	9	37	34	23	44	42	45	26	22	10	10	22	24	..	..	27.4
Frankfort	Maximum	56	63	61	45	38	36	37	41	48	48	49	49	48	47	24	22	44	44	39	51	48	50	51	44	30	27	30	42	39	..	..	43.1
	Minimum	26	31	39	33	33	31	33	34	28	31	27	35	26	24	7	4	19	35	30	25	39	38	42	28	24	19	14	25	22	..	..	27.7
Franklin	Maximum	62	66	61	49	38	44	42	58	51	52	58	48	54	47	29	26	43	41	43	57	57	55	42	41	31	26	34	47	38	..	..	46.2
	Minimum	28	37	47	37	33	33	35	34	32	33	37	37	24	29	13	7	22	39	31	30	52	46	41	30	25	21	12	29	11	..	..	30.5
Greensburg	Maximum	62	66	60	50	38	41	40	44	46	50	53	54	52	45	28	24	45	46	43	59	58	57	57	50	31	29	32	44	43	..	..	46.4
	Minimum	24	28	18	33	31	27	32	30	23	31	25	34	20	22	9	4	15	38	25	22	44	41	43	27	23	18	9	21	20	..	..	26.4
Irvington	Maximum	57	64	56	42	38	42	40	43	49	48	53	48	50	46	22	24	47	43	41	53	51	54	49	36	29	23	32	44	32	..	..	43.3
	Minimum	28	41	42	33	33	27	34	35	32	30	29	32	24	22	7	5	22	37	27	27	38	38	36	28	23	19	12	27	20	..	..	27.9
Junction City	Maximum	60	66	55	44	42	37	37	40	48	48	52	50	51	45	32	21	44	41	54	55	56	51	50	44	27	26	30	40	38	..	..	44.4
	Minimum	27	33	42	34	31	28	32	32	24	32	25	31	24	24	8	4	17	28	24	38	39	39	41	27	21	15	11	24	21	..	..	26.8
Leitchfield	Maximum	58	64	56	47	37	41	40	44	46	49	53	48	51	44	20	24	46	47	42	59	53	52	49	38	29	24	31	43	33	..	..	43.7
	Minimum	27	36	45	35	32	28	28	29	28	29	29	33	21	20	8	5	20	35	28	28	38	39	36	27	23	18	6	25	18	..	..	26.7
Lexington	Maximum	58	62	50	35	32	32	35	38	45	44	47	42	47	40	15	19	43	41	36	48	51	47	44	32	24	20	27	37	29	..	..	38.6
	Minimum	30	46	35	32	30	28	30	33	34	30	34	31	26	15	5	2	19	30	28	32	41	36	32	23	18	16	12	25	18	..	..	26.6
Louisville	Maximum	58	61	52	38	36	37	36	41	48	48	51	44	49	45	16	23	47	43	39	50	45	52	45	34	27	23	30	42	30	..	..	41.0
	Minimum	28	42	36	32	32	29	33	34	33	31	33	30	26	15	5	4	23	33	30	30	38	37	34	26	21	18	14	27	22	..	..	27.4
Do. (Cherokee Park)	Maximum	56	61	57	41	36	36	36	41	48	48	50	50	49	47	22	23	47	45	38	50	45	52	47	38	30	25	31	43	41	..	..	42.6
	Minimum	24	33	41	31	31	27	33	34	29	29	27	33	23	21	6	4	20	36	29	24	37	33	37	27	24	19	14	25	20	..	..	26.6
St. John	Maximum	60	65	60	47	38	40	40	40	48	48	55	45	48	43	22	23	45	48	40	54	52	52	50	38	30	31	30	41	38	..	..	43.8
	Minimum	45	35	45	36	30	25	35	30	28	28	27	33	21	22	8	7	20	30	25	25	34	32	38	30	24	18	10	25	25	..	..	27.3
Scott	Maximum	54	64	55	35	32	32	35	37	42	46	45	40	45	41	18	20	43	40	38	46	40	41	43	35	26	22	28	36	34	..	..	38.4
	Minimum	20	31	35	31	29	28	30	31	29	27	25	34	25	18	3	0	16	29	24	24	32	34	35	25	19	15	8	26	18	..	..	24.3
Shelbyville	Maximum	51	66	55	39	34	35	36	41	46	48	53	46	50	40	21	22	45	43	45	50	47	50	45	42	28	26	31	41	35	..	..	41.9
	Minimum	23	35	36	29	28	27	29	29	27	25	24	31	21	17	3	1	15	31	25	24	35	33	33	23	20	14	9	19	15	..	..	23.5
Taylorsville	Maximum	56	63	55	41	35	36	36	41	48	48	51	46	49	45	22	22	45	42	39	50	48	51	48	38	28	25	30	42	36	..	..	41.9
	Minimum	25	29	40	32	32	30	32	32	26	29	25	34	23	21	6	4	18	36	29	24	38	37	37	27	23	18	12	21	17	..	..	26.1
Williamstown	Maximum	59	69	59	49	43	35	39	38	43	47	49	44	49	43	36	26	43	43	42	50	42	48	45	36	30	24	33	39	36	..	..	42.7
	Minimum	26	36	37	31	29	30	30	31	29	28	27	33	24	18	3	0	16	30	26	25	33	33	34	25	20	15	10	25	18	..	..	24.9
Eastern Division.																																	
Ages	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Beattyville	Maximum	69	69	65	65	41	36	38	42	46	51	54	46	55	50	28	28	49	44	40	59	55	51	49	50	36	25	36	43	38	..	..	46.8
	Minimum	22	22	37	37	32	32	32	38	27	31	22	27	30	24	13	6	19	38	29	21	36	44	42	28	18	19	5	25	22	..	..	26.9
Berea	Maximum	63	67	55	39	35	34	31	39	50	55	52	45	52	46	19	23	43	44	41	56	52	52	48	42	35	29	29	40	35	..	..	43.2
	Minimum	29	40	38	34	31	29	29	32	26	32	28	37	28	18	9	3	19	34	28	29	44	40	42	25	20	15	9	25	19	..	..	27.3
Catlettsburg	Maximum	57	64	60	50	41	35	41	39	46	48	48	47	50	49	31	22	45	44	37	59	49	48	48	46	29	26	30	41	37	..	..	43.7
	Minimum	31	30	34	38	30	36	31	31	35	34	26	29	32	30	11	7	16	34	24	22	35	37	33	27	23	18	10	23	23	..	..	27.0
Farmers	Maximum	48	50	56	59	40	34	38	44	44	48	50	48	51	40	16	22	48	49	41	52	52	52	50	48	30	26	31	40	36	..	..	42.6
	Minimum	20	23	35	35	30	27	30	22	24	30	20	22	28	9	10	4	11	33	28	20	37	39	38	27	21	16	3	20	21	..	..	23.6
Maysville	Maximum	56	63	49	40	37	38	39	42	45	48	47	42	48	42	23	20	47	43	38	50	42	49	47	40	30	26	31	38	38	..	..	41.3
	Minimum	27	31	35	34	31	29	32	34	28	32	27	23	26	36	9	4	16	34	25	24	35	36	37	31	23	18	12	25	21	..	..	27.1
Middlesboro	Maximum	57	65	62	50	42	37	39	40	45	52	57	46	54	50	32	27	41	43	55	53	55	55	51	33	27	34	38	47	43	..	..	45.9
	Minimum	33	28	40	41	35	30	33	34	24	41	26	31	34	25	15	7	18	35	20	37	48	48	33	23	19	14	16	19	24	..	..	28.7
Mount Sterling	Maximum	59	62	53	40	36	31	32	40	40	44	49	46	48	37	17	19	42	54	37	50	52	50	50	35	26	23	29	40	34	..	..	40.5
	Minimum	28	34	37	32	30	28	30	33	29	25	26	28	26	17	6	0	14	32	27	24	37	38	35	25	20	13	9	23	19	..	..	25.0
Richmond	Maximum	61	67	52	46	38	34	35	39	46	47	50	43	50	43	20	21	43	41	41	52	51	52	49	40	28	25	29	39	34	..	..	41.9
	Minimum	29	36	43	34	22	28	31	32	30	31	30	38	27	20	9	1	16	36	29	27	40	39	40	28	22	15	11	25	20	..	..	27.2
Williamsburg	Maximum	62	68	68	49	41	37	38	41	46	56	50	51	57	56	31	39	44	44	43	59	55	56	54	49	31	28	36	47	44	..	..	47.6
	Minimum	29	32	39	40	34	31	34	34	26	37	26	34	34	23	13	7	13	38	29	23	40	50	48	31	24	20	12	14	24	..	..	28.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a], [b], [c] etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Qu'Appelle
Swift Current
Minnedosa
Winnipeg
The Pas
Barkerville
Kamloops
Kalispell
Spokane
Walla Walla
Williston
Bismarck
Rapid City
0.5
1
2
4
6

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CLIMATOLOGICAL DATA

KENTUCKY SECTION

MARCH, 1920.

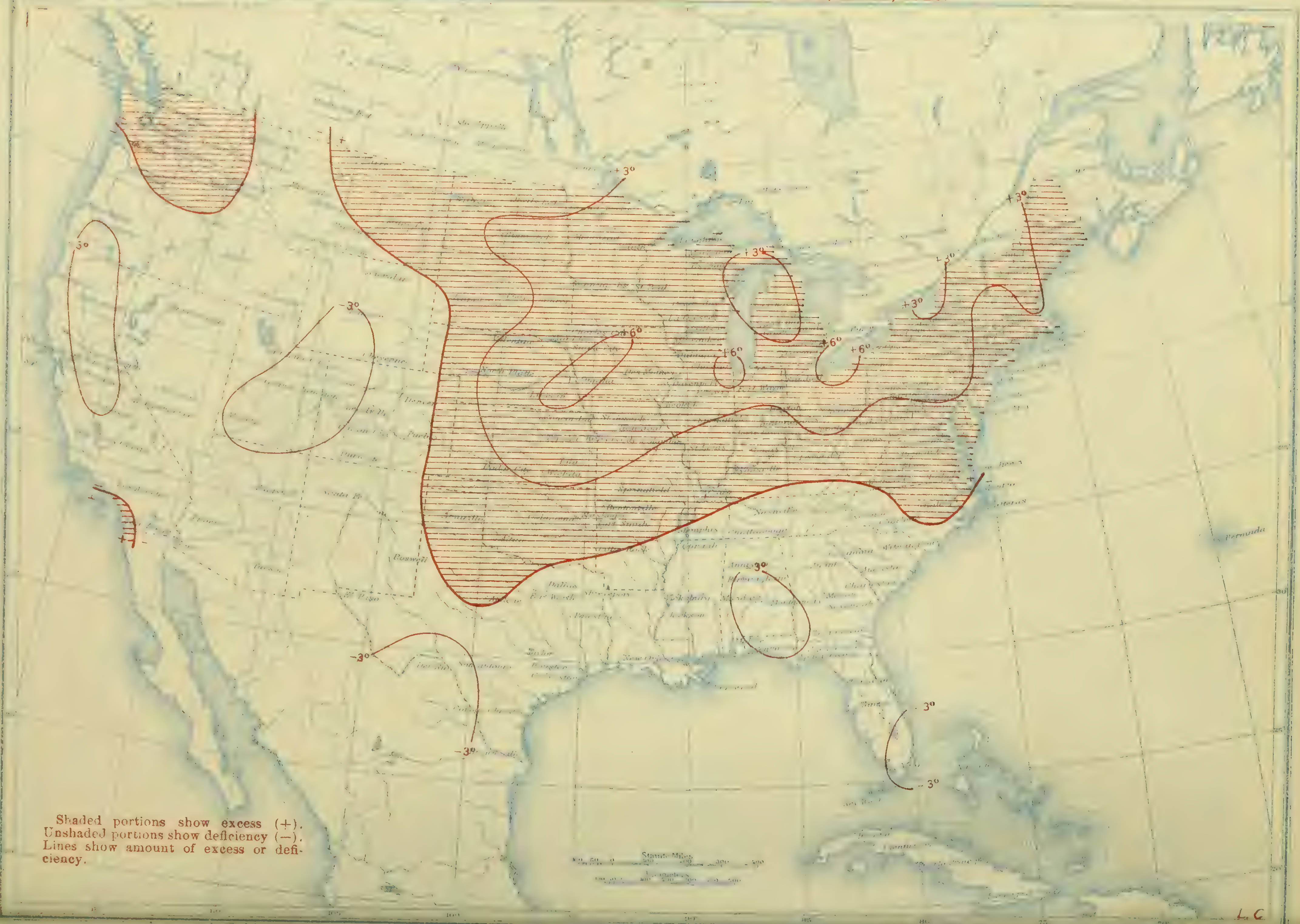
BY

FERDINAND J. WALZ

PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
MAY 28, 1920.

Departure of the Mean Temperature from the Normal, March, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

L. C

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXV. Louisville, Ky., March, 1920. No. 3

GENERAL SUMMARY.

Low temperatures and hard freezes during the first decade were decidedly unfavorable for winter grains and clover, which continued to deteriorate. The soil could not be worked and no progress was made with plowing or seeding. Warmer weather prevailed during the second decade, but the heavy rainfalls prevented most outdoor work; although a few tobacco plant beds were sown. Temperatures rose above normal on the 21st and continued abnormally high until the end of the month. The continued warm weather caused premature budding of fruit, especially peaches, plums, and pears. Early peaches began to blossom during the last week.

On account of the saturated soil, it was only during the last week that much plowing or sowing of oats could be done. Winter grains began to grow during the last decade, and the effect of the unfavorable winter became apparent. Except for the small part of the crop that was sown early, winter wheat started feebly; and it was evident by the end of the month that much of it would be plowed up and planted to other crops. The condition of both wheat and rye was very poor, and the outlook for these crops the most discouraging in many years.

Snowfall was light and of no consequence in protecting grain. High winds prevailed to an unusual degree, even for March; but were not especially destructive except on the 11th.

PRESSURE.

Low pressure areas of great strength were the dominant pressure feature, the most important being as follows: 3d-4th, passing northeastward across the Ohio Valley with moderate rainfall; 11-12th, moving northeastward across the central valleys attended by heavy rains and destructive winds; 15-16th, a development of great intensity moving across the Lake Region and skirting this section, bringing heavy rains; 18-19th, moving eastward across the central valleys from the middle west, with high winds and heavy rains; and 25-26th, moving from the southwest nearly northward across the central valleys attended by moderate rains over this section. A high pressure area of great strength passed across the central states on the 6-10th, bringing the cold weather of the first decade.

The mean sea-level pressure, based on the records of two stations, was 30.05 inches. The extremes were 30.57 inches at Lexington on the 7th, and 29.38 inches at Louisville on the 28th.

TEMPERATURE.

The average temperature for the month, 38 stations reporting, was 46.3°, which is 0.3° above normal. Minimum temperatures ranging from zero to 20° occurred on the 1st and in the period 5-8th. Warmer weather set in on the 10th, maximum temperatures ranging from 60° to 75° on most days during the remainder of the month, and going above 80° on the 27th and 28th a many stations. The extremes were 88° at Bowling Green on the 27th, and −1° at Junction City on the 8th.

PRECIPITATION.

Precipitation for the State, determined from the reports of 54 stations, averaged 4.85 inches, which is 0.19 inch above normal. It occurred in the periods 4-5th; 10-13th, and 16-19th in moderate to heavy rains; and in light showers on the 7th, 25-26th, and 28th. Although heavy on only a few days, rainfall occurred with such frequency as to keep the soil too wet to be worked until nearly the end of the month. In general monthly amounts were largest along the Ohio River between the mouths of the Kentucky and Wabash, ranging from 5 to 7 inches. Over the central, eastern, and most of the southern counties amounts ranged between 3 and 5 inches. At the various stations monthly totals ranged between 7.40 inches at Middlesboro and 3.15 inches at Jackson. Much of the best agricultural district received the heaviest precipitation, while the lightest was mainly over the eastern mountain region.

WIND.

The total wind movement at Louisville was 12,567 miles, and at Lexington 13,853 miles, with average hourly velocities of 16.9 and 18.6 miles, respectively. The maximum velocity for five minutes was at the rate of 56 miles per hour at both stations, from the south on the 11th at Louisville and from the southwest on the 15th at Lexington.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 71 per cent, at 12 noon 53 per cent, and at 7 p. m. 58 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 66 and at Lexington 54.

MISCELLANEOUS

March 11.—Damage to wire systems, buildings, etc., by windstorms was estimated at $150,000. A schoolhouse at Sherman, Ky. was blown down injuring 50 children. In the same locality six stock barns, four dwellings, and other buildings were demolished, the total damage in this vicinity being placed at $50,000.

COMPARATIVE DATA FOR MARCH.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain
1889	40.5	− 5.5	84	18	1.52	−3.14	..
1890	41.2	− 4.8	78	4	8.34	+3.68	..
1891	41.8	− 4.2	71	9	8.08	+3.42	..
1892	40.6	− 5.4	82	7	4.08	−0.58	..
1893	45.0	− 1.0	89	5	2.76	−1.90	..
1894	50.8	+ 4.8	86	10	2.72	−1.94	..
1895	45.0	− 1.0	88	15	3.17	−1.49	9
1896	41.1	− 4.9	80	8	6.16	+1.50	12
1897	49.6	+ 3.6	86	20	7.94	+3.28	14
1898	50.7	+ 4.7	84	16	7.59	+2.93	13
1899	43.9	− 2.1	80	− 3	8.10	+3.44	15
1900	42.8	− 3.2	81	− 3	2.58	−2.08	9
1901	46.4	+ 0.4	87	3	3.50	−1.16	10
1902	47.2	+ 1.2	82	7	4.44	−0.22	11
1903	52.5	+ 6.5	85	19	4.43	−0.23	12
1904	47.7	+ 1.7	88	12	6.26	+1.62	12
1905	52.2	+ 6.2	86	22	4.45	−0.21	9
1906	39.2	− 6.8	75	3	6.37	+1.71	16
1907	54.9	+ 8.9	92	18	2.28	−2.38	10
1908	51.8	+ 5.8	88	19	5.42	+0.76	13
1909	41.8	− 1.2	74	17	5.14	+0.48	11
1910	55.0	+ 9.0	91	11	0.79	−3.87	3
1911	46.0	0.0	87	7	2.57	−2.09	9
1912	41.3	− 4.7	88	10	6.22	+1.56	15
1913	46.5	+ 0.5	85	9	7.22	+2.56	10
1914	41.8	− 4.2	78	2	3.62	−1.04	12
1915	37.8	− 8.2	65	11	2.11	−2.55	8
1916	43.5	− 2.5	84	4	3.39	−1.27	10
1917	45.9	− 0.1	84	0	6.52	+1.86	14
1918	51.6	+ 5.6	85	17	1.97	−2.69	8
1919	47.6	+ 1.6	81	16	5.65	+0.99	9
1920	46.3	+ 0.3	88	− 1	4.85	+0.19	10

Climatological data for March, 1920.

Stations	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	47.8	+ 1.1	82	27	6	1	42	3.39	−0.52	0.72	T.	9	20	6	5	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	47.3	+ 0.2	78	27†	12	7	31	4.43	−0.20	1.49	0.2	8	13	6	12	sw.	E. W. Horr.
Calhoun	McLean	437	16	46.9	− 2.4	82	27	9	7	39	5.85	+1.88	1.66	T.	11	11	10	10	se.	W. A. Taylor.
Earlington	Hopkins	420	29	^{b}47.4	+ 0.1	82^{b}	27†	9	1	42	3.97	−0.91	1.30	T.	8	17	0	14	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	47.0	....	80	27	4	1	40	3.96	....	1.00	T.	11	14	9	8	s.	C. R. Lovell.
Henderson	Henderson	327	12	....	....	....	....	....	....	....	7.03	+2.25	1.80	T.	9	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	23	^{a}47.2	− 2.0	84^{a}	27	6^{a}	1	43^{a}	4.85	+0.01	1.06	T.	10	13	8	10	s.	W. E. Graves.
Marion	Crittenden	571	21	47.3	− 1.3	80	23	9	7	31	5.29	+0.50	1.80	T.	7	12	8	11	s.	B. C. Paris.
Mayfield	Graves	364	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	J. N. Davis.
Owensboro	Daviess	479	23	47.2	+ 0.3	81	27†	10	1†	38	5.76	+0.98	1.75	T.	10	12	10	9	s.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	47.0	....	82	28	12	1†	31	4.99	....	2.17	0.4	10	17	0	14	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	....	....	....	....	....	....	....	4.72	+0.33	1.84	T.	9	....	....	....	....	Frank L. Brown.
Princeton	Caldwell	529	10	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Ray Baker.
Russellville	Logan	590	6	45.9	− 3.3	81^{a}	27	6^{a}	1	35^{a}	4.42	−0.87	2.05	T.	4	19	6	6	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Taylor Davis.
Anchorage	Jefferson	700	19	44.4	− 0.7	79	27	7	8	45	5.59	+1.35	1.43	0.5	9	18	6	7	sw.	C. E. Barret.
Bardstown	Nelson	637	23	47.6	+ 1.0	81	27	8	8	43	5.52	+0.83	2.22	1.5	7	20	4	7	s.	Chas. M. Talbott.
Bowling Green	Warren	500	29	47.4	− 0.9	88	27	11	1†	44	4.69	+0.23	1.48	0.2	8	17	8	6	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	....	....	....	....	....	....	....	4.78	....	1.56	2.0	11	....	....	....	....	James H. Young.
Burnside	Pulaski	773	27	....	....	....	....	....	....	....	5.74	+0.48	2.15	0.5	12	....	....	....	....	F. E. Bradshaw.
Carrollton (Lock No.1)	Carroll	492	21	....	....	....	....	....	....	....	5.03	+0.70	1.50	....	12	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	6	....	....	....	....	....	....	....	6.81	....	2.18	0.2	12	....	....	....	....	W. A. Cockerill.
Eubank	Pulaski	1177	25	^{b}44.4	− 1.9	77^{b}	27	1^{b}	8	39^{b}	3.50	−1.75	1.60	0.5	7	11	7	13	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	46.3	+ 0.1	74	27†	11	8†	36	5.33	+0.63	1.20	0.2	9	17	1	13	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	48.3	− 1.8	79	27	9	7	33	5.48	+0.73	2.00	0.5	10	12	6	13	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	27	46.2	− 0.6	79	27	4	1	44	4.36	−0.67	1.35	0.1	13	13	8	10	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	....	....	....	....	....	....	....	4.00	−0.21	1.20	T.	10	....	....	..	....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	47.4	+ 0.6	78	27	10	7	37	6.07	+1.47	1.67	T.	8	15	4	12	sw.	W. J. Piggott.
Junction City	Boyle	985	26	45.1	− 1.0	78	27	− 1	8	44	5.18	−0.04	1.55	1.2	17	12	13	6	se.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	46.3	+ 0.3	78	27	9	7	38	4.98	+0.19	1.57	0.4	9	13	11	7	s.	John E. Stone.
Lexington	Fayette	989	32	44.7	+ 1.3	75	27	9	7	33	4.62	−0.10	1.42	1.0	12	13	4	14	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	46.6	+ 1.3	78	27	10	7	29	5.49	+1.17	1.49	T.	10	14	9	8	s.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	10	46.7	+ 1.4	79	27	10	7	40	6.22	+2.38	1.77	0.9	11	13	10	8	sw.	Wm. I. Hunt.
St. John	Hardin	777	23	44.8	− 0.3	78	27†	9	6†	42	4.90	−0.09	1.80	T.	6	20	6	7	....	Sisters of Loretto.
Scott ¶	Kenton	900	22	44.8	+ 1.4	73	27	10	8	35	4.43	−0.01	1.29	0.2	10	14	6	11	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	42.0	− 2.7	74	28	5	8	36	6.14	+1.43	1.86	T.	8	12	11	8	s.	F. A. Miller.
Taylorsville	Spencer	489	17	44.9	− 0.9	76	27	7	1	41	5.97	+1.63	1.57	0.6	13	15	3	13	sw.	E. D. Bourne.
Williamstown	Grant	943	17	46.2	+ 3.0	80	24	8	8	35	4.43	+0.27	1.50	0.5	11	9	13	9	....	Miss Rose Carter.
Woodbury	Butler	533	2	....	....	....	....	....	....	....	3.53	....	1.42	T.	9	....	....	....	....	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	^{b}47.0	....	79	27	5	8	41	5.06	....	1.77	4.0	11	17	5	9	....	S. A. Driver.
Ashland	Boyd	534	13	46.4	− 1.0	78	26	10	1	41	3.52	−0.94	1.30	1.0	9	14	6	11	w.	Mrs. Sabina E. Hall.
Beattyville	Lee	650	16	45.1	+ 0.4	83	27	0	8	50	3.83	−1.50	1.68	T	15	7	13	11	w.	Prof. Chas. D. Lewis.
Berea	Madison	1070	18	46.7	− 0.4	79	27	4	8	38	3.83	−0.93	1.37	T.	10	16	2	13	sw.	Forester Farley.
Cynthiana	Harrison	684	2	....	....	....	....	....	....	....	5.42	....	1.40	T.	9	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	31	....	....	....	....	....	....	....	5.44	+1.35	1.11	T.	9	15	6	10	sw.	J. V. Oldham.
Farmers	Rowan	668	12	46.2	+ 1.1	74	25†	0	8	39	4.36	−0.15	2.00	1.0	10	15	7	8	w.	Miss Margaret Carter.
Jackson	Breathitt	776	8	....	....	....	....	....	....	....	3.15	−1.48	2.05	T.	3	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	5	....	....	....	....	....	....	....	4.24	....	1.40	T.	13	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	16	....	....	....	....	....	....	....	3.29	−0.83	1.19	3.5	11	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	22	46.6	+ 2.5	78	25	9	8	41	4.97	+0.33	1.17	3.0	9	14	5	12	s.	Harry M. Robinson.
Middlesboro	Bell	1128	21	46.4	− 2.1	78	26	5	8	43	7.40	+1.92	2.30	....	10	21	7	3	....	B. H. Perkins.
Mount Sterling	Montgomery	930	30	45.4	+ 1.7	75	25	6	8	35	5.07	−0.24	1.82	0.2	12	16	6	9	w.	W. R. McKee.
Oliver	Greenup	....	0	....	....	....	....	....	....	....	3.71	....	1.01	0.5	13	....	....	....	....	Percy Humphrey.
Pikeville	Pike	634	14	....	....	....	....	....	....	....	4.26	−0.29	1.62	....	11	....	....	....	....	I. M. Williams.
Richmond	Madison	926	25	47.2	+ 1.8	79	27	9	8	34	3.76	−0.53	1.26	0.6	11	19	2	10	....	J. W. Crooke.
Vanceburg	Lewis	525	3	....	....	....	....	....	....	....	4.74	....	1.05	....	8	....	....	....	....	Samuel Johnson.
Williamsburg	Whitley	939	22	48.2	+ 2.1	82	27	8	1†	44	4.18	−0.74	1.72	0.5	7	14	13	4	w.	D. B. Bradley.
State averages and extremes.			....	46.3	....	88	27	− 1	8	50	4.85	....	2.30	0.6	10	15	6	10	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing: for example, b represents two days, etc.

* Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

¶ Post office address, Covington, Ky.

Rivers.—Moderate to heavy rainfall and melting snow caused a general rise in the upper reaches between the 6th and 15th; which was increased by the heavy rains of the 16th and 19th, resulting in flood stages along the Kentucky border from Catlettsburg to Madison, Ind. on the 20th. Flood stage was reached at Evansville and Cloverport on the 18th, at Louisville and Cairo on the 20th, and at Paducah on the 24th. The crest at Madison, Ind. was 47.8 feet, at Louisville 31.5 feet, and at Cloverport 46.7 feet, on the 23d. In the Kentucky River a crest of 30 feet was reached at Beattyville on the 20th. This flood subsided rapidly after the 22d in the upper reaches, but very slowly in the lower river, remaining above flood stage in the Evansville-Cairo section until the end of the month. Losses were mostly in connection with suspension of business and because of flooding of basements and moving of property to higher levels.

Errata. February, 1920: Farmers, lowest temperature should be 3 on 27th; Frankfort and Hopkinsville, greatest 24-hour precipitation should be 0.47 and 0.81, respectively. Middlesboro, days with .01 or more precipitation should be 10.

Daily Precipitation for March, 1920.

Stations.		Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																	
Beaver Dam	G				.78						.17	.33	.44				.72		.36	.55						.15			.15				[illegible]
Blandville	M		T.	.11	.66	T.				T.	.03	1.49	.71				.38		.68						T	.41						T.	4.45
Calhoun	G				.07	T.		T.			.24	1.16	.55	.02			1.16		.22	.96						.18	.16		.13				[illegible]
Earlington	G				.39	.10		T			T.	.25	1.30	T			T.	.13		1.01							.33		.16				3.97
Greenville	G				.60	.02					.10	1.00	.45				.39		.22	.89						.24	.03		[illegible]				3.96
Henderson ‖	O				.14	.20	T.					.56	1.80	T.			1.78	.12		1.60						.65	.18						7.03
Hopkinsville	C				.60	.26		T			.04	.63	.70				.53		.73	1.06						.29			[illegible]				[illegible]
Marion	O				.46	T.					1.80	.60					1.20			.78							.10		[illegible]				5.29
Mayfield ‖	M																																
Owensboro	O				.40	T.		T.			.15	1.00	.35	T.			1.75	.63	.37	.75						.30	T		.06				5.76
Paducah (Lone Oak)	O			T.	.62			.02			.16	2.17	.03				.59		.12	.84						.35	.09						4.99
Paducah	O				.46	.31		T.			.06	.50	1.84				.18	.31		.60						T	.40		T				4.72
Princeton ‖	G																																
Russellville ‖	G				T.	.87		T.				1.25						T		2.05									.25				4.42
Central Division.																																	
Alpha	C																																
Anchorage	O				.48	.04		T.			.42	.78	.65	T.			1.43		.55	1.02						T.			.22				5.59
Bardstown	S				.60			.15			.25	.95					2.22			1.20									.15				5.52
Bowling Green	G				.70			.25			T.	.43	1.48	T.			.68		.70	.30						.15							[illegible]
Brownsville ‖	G				.02	.80		.02			.02	.26	1.35				.03	.47		1.56							.11		.14				4.78
Burnside ‖	C					.70		.05			T.	.16	1.26	.08	.05		.07	.67		2.15							.14		.31	.07			5.74
Carrollton ‖ (Lock No. 1)	O					.43		.04			.02	.68	.26	.28			.98	.56		1.50						.02	.03			.23			5.03
Cloverport ‖	O				.03	.58		T.			.01	.58	1.48	.11	T.		.87	.68		2.18	.04						.19		.06				6.81
Eubank ‖	C					.72		.04				.10	.68		.06			.30		1.60													3.50
Frankfort ‖	K				T.	.69	T.	.02			T.	.52	1.07	.08	T.		.92	.77		1.20	T.						T.		.06	T			5.33
Franklin	G			T.	.60	.08		T.			.23	.15	.75	T.			.83		.18	2.00						.30			.36				5.48
Greensburg	G				.49	.08		.10			.15	.42	.54	.09			.44		.27	1.35						.16			.18	.06			4.36
High Bridge ‖	K					.52	T.	.03				.26	.34	.38			.67	.50		1.20	.01								.09				4.00
Irvington	O				.40	T.		T.			.37	.67	.85	T			1.64		.17	1.67						T	T.		.30				6.07
Junction City	K				.68	.14		.12			.06	.13	.30	.06	.01		1.13	.08	.08	1.55	.08					.06	.15		.18	.37			5.18
Leitchfield	G				.58			.02			*	1.50		T.			.97		*	1.57						.16			.18				4.98
Lexington ***	K				.60	T.	.04	.04			.33	.58	.07	.01			1.42		.95	.45						.02			.11				4.62
LOUISVILLE***	O				.41	T.	T.	T.			.54	.88	.24	T.			1.37		1.16	.33						.01	.14		.41			T	5.49
Do. (Cherokee Park)	O				.36	.06		.04				1.14	.76				1.55			1.77	.02					.02	.09		.28	.13			6.22
St. John	S				.60						.50	.90	.90			T.	1.80									T.			.20				4.90
Scott	L				.62	.09	T.	T.			.10	.49	.79	T.			1.29		T	.92	.03					T.	.07		.03				4.43
Shelbyville	S				.65	T.		T.			.20	.85	.95				1.86			1.47	.04								.12				6.14
Taylorsville	S				.54	.04	T.	.01			.36	.61	.81	.02			1.55		.15	1.57	.04					.05			.22				5.97
Williamstown	L				.10	.05		.05			.10	.50	.35	T.			1.50			1.50	.05						T		.04	.19			4.43
Woodbury ‖	G				.03	.26						.18	1.11				.01	.34		1.42							.12		.06				3.53
Eastern Division.																																	
Ages	K				.25	.10		.30			.05	.15	1.77	.47			.50	.02		1.10									.35				5.06
Beattyville ‖	K					.38	T.	.08	.03		.03	.25	.45	.11	.03		.09	.30		1.68	.04						.14		.14	.08			3.83
Berea	K				.75						.06	.14	.26		T.		.82		.04	1.37						.05			.12	.22			3.83
Catlettsburg ‖	B					.52		.09				.25	.25	.11			.19	.74		1.30	.07												3.52
Cynthiana ‖	L					.90		T.				.42	.85	.15	T.		.60	1.00		1.40	.05						T.		.05	T.			5.42
Falmouth ‖	L					.80	T.	.01				.52	1.11	.18	T.		.84	.68		1.19	.19								T.				5.44
Farmers	L					.35	.12	.05				.17	.28	.17	T.		1.10	.05		2.00										.07			4.36
Jackson ‖	K					1.00		T.				T.	T.				T.	.10		2.05							T.		T.				3.15
London ‖	C	.22				.45		.10			.06	.25	1.00	.10	.08		.03	.20		1.40							.10		.25				4.24
Louisa ‖	B	.02				.35	T.	.19				.07	.17	.50	.01		.17	.55		1.19	.07						T.						3.29
Maysville ‖	O					.60		T.				.50	.60	.30	T.		.50	1.05		1.17	.10						T.			.15			4.97
Middlesboro	C					1.57	.18					.23	2.30	.25			.43			1.80	.03					.27			.34				7.40
Mount Sterling	L				.45	.03		.02	T		.24	.26	.41	.03			1.35		T.	1.82	.06					T.	T.		.03	.37			5.07
Oliver ‖	O					.60	.03	.03	.05			.39	.25	.15	T.		.15	.85		1.01	.16						.02		.08				3.71
Pikeville ‖	B	T.				.12					.08	.18	.64	.44			.22	.68		1.62	.08						.12			.08			4.26
Richmond	K				.45	.03	T.	.05			.20	.13	.17	.03			1.15			1.26						T.			.26	.03			3.76
Vanceburg ‖	O	.22				.65						.50	.80				.85	.49		1.05	.18												4.74
Williamsburg ‖	C					.50		.05			T.	T.	1.72	.12	T.			.24		1.30	T.						T.		.25				4.18

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi

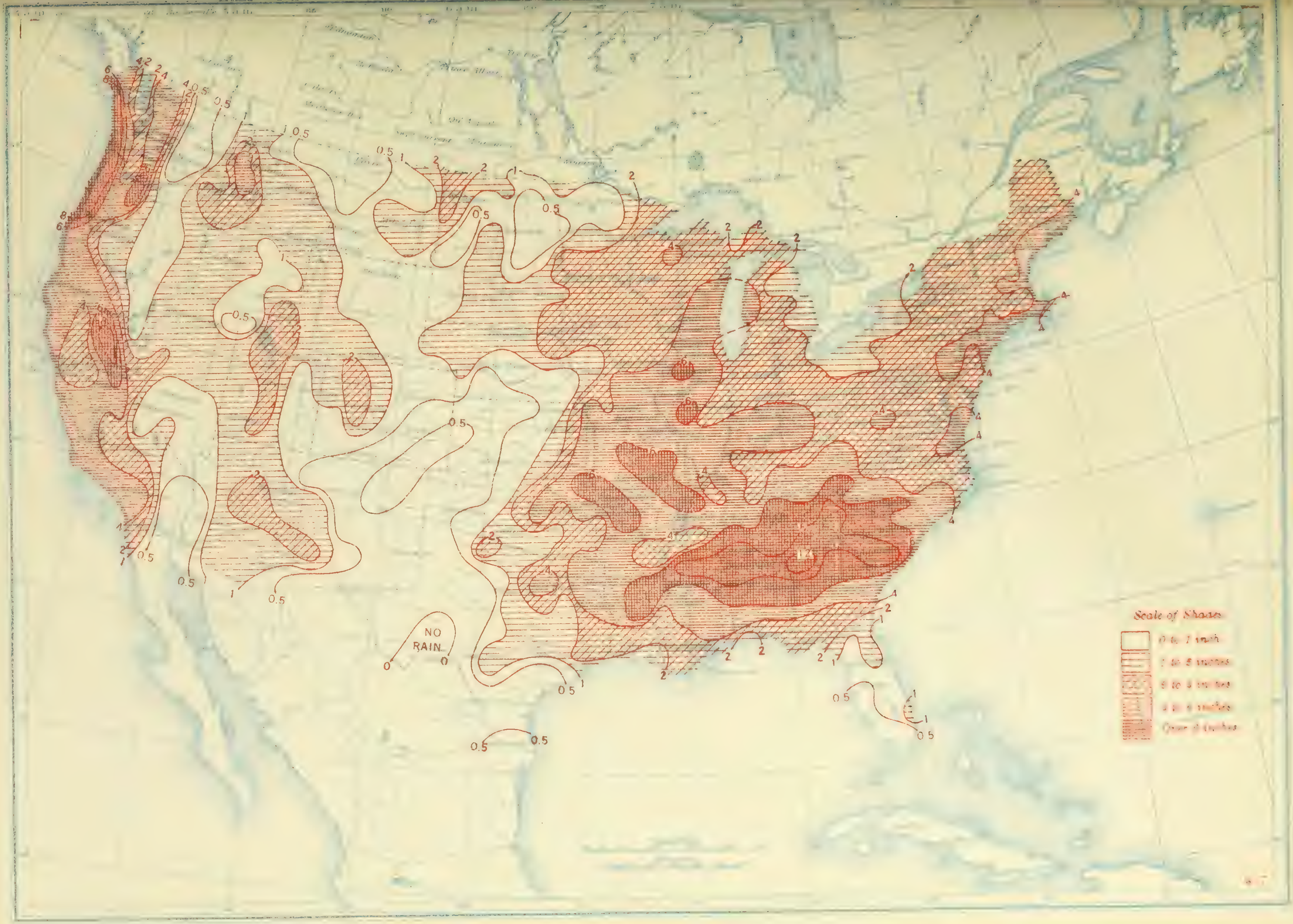
Daily temperatures for March, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	42	53	58	57	35	31	26	41	55	54	58	65	45	67	68	65	60	63	62	56	66	71	73	73	68	70	82	81	74	74	73	60.2
	Minimum	6	25	29	34	19	16	10	13	25	47	48	39	28	40	51	44	32	40	44	30	35	33	40	40	57	54	40	55	42	35	45	35.4
Blandville	Maximum	40	47	51	50	27	28	24	40	51	52	62	61	47	64	64	62	56	62	64	53	57	68	68	68	70	68	78	78	65	70	66	56.8
	Minimum	13	28	35	24	17	15	12	17	29	47	51	38	31	38	54	45	35	43	42	31	34	37	47	54	55	52	52	61	41	44	50	37.8
Calhoun	Maximum	41	49	56	54	27	29	23	39	52	52	57	61	43	64	68	63	60	62	59	57	66	70	68	71	66	69	82	81	74	73	71	58.3
	Minimum	11	21	32	26	18	15	9	13	28	45	47	37	29	30	48	44	33	39	42	30	34	36	45	52	58	52	43	55	41	42	47	35.5
Earlington	Maximum	44	52	58	55	27	30	26	41	51	54	61	59	45	69	..	..	59	61	63	55	63	70	69	73	67	68	82	82	67	71	70	[1]58.4
	Minimum	9	30	29	26	19	17	11	13	31	50	50	37	32	30	..	..	45	40	43	31	30	32	47	54	59	53	40	57	43	46	50	[1]36.3
Greenville	Maximum	34	48	56	53	32	32	27	39	51	54	59	65	44	65	69	65	56	62	63	54	62	68	68	71	67	68	80	84	76	70	62	58.5
	Minimum	4	26	28	28	19	15	10	11	29	47	47	39	31	30	53	44	34	39	44	31	30	33	44	51	56	53	40	55	41	41	43	35.4
Hopkinsville	Maximum	41	51	55	52	28	32	29	44	54	53	59	64	49	69	68	64	63	61	64	58	66	72	71	74	67	..	84	83	75	74	71	[a]59.8
	Minimum	6	24	33	26	19	15	10	13	19	47	48	39	31	28	51	45	34	41	41	31	32	32	41	59	56	..	41	56	40	33	50	[a]34.4
Marion	Maximum	40	47	50	52	34	26	24	39	51	52	54	61	44	64	63	64	56	57	62	53	60	68	71	70	68	65	78	80	71	69	69	56.8
	Minimum	12	29	35	34	17	15	9	15	29	47	49	44	31	34	54	44	34	35	49	30	33	43	48	50	57	50	51	57	40	45	51	37.8
Mayfield §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro	Maximum	41	51	57	53	32	27	23	40	53	45	61	56	41	63	65	65	62	61	55	54	62	68	67	69	66	67	81	81	77	70	71	57.5
	Minimum	10	27	29	32	18	16	10	15	28	40	43	38	32	30	50	46	36	45	43	32	37	38	44	53	59	53	43	67	42	41	46	36.9
Paducah (Lone Oak)	Maximum	34	44	48	40	25	24	24	42	50	55	62	63	44	63	66	49	62	62	64	56	54	68	69	70	72	68	80	82	71	72	66	56.4
	Minimum	12	27	32	23	12	15	12	16	36	46	50	36	32	36	46	44	46	42	44	31	33	38	46	52	65	50	50	58	40	44	48	37.5
Princeton §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Russellville §§	Maximum	37	48	55	49	29	30	26	40	53	51	..	66	50	66	67	61	58	63	58	55	63	68	66	61	67	68	81	80	71	63	68	[a]57.4
	Minimum	6	18	28	38	20	17	11	14	20	27	29	..	31	31	49	53	35	37	42	33	34	36	45	51	52	54	46	53	41	39	45	[a]34.4
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	42	50	58	50	30	26	23	38	54	52	55	62	38	60	66	63	55	56	54	56	61	68	67	69	70	68	79	76	66	68	68	56.4
	Minimum	10	20	23	30	18	11	9	7	26	44	46	36	26	22	41	46	34	33	39	30	29	34	36	45	52	52	31	53	41	36	38	32.3
Bardstown	Maximum	42	50	60	51	46	30	25	40	54	51	57	69	46	72	70	64	63	55	55	60	64	70	70	73	72	69	81	77	60	71	73	59.4
	Minimum	18	22	27	46	21	14	10	8	25	41	48	45	29	26	50	46	45	33	45	32	33	35	39	40	56	57	39	55	44	38	40	35.8
Bowling Green	Maximum	42	52	58	53	32	32	27	42	48	56	59	68	43	65	70	65	62	65	62	57	56	71	71	75	68	72	88	75	71	72	63	59.4
	Minimum	11	22	28	32	21	15	11	13	23	26	48	42	32	29	51	46	36	41	46	33	36	37	40	46	59	55	44	46	48	39	43	35.5
Eubank	Maximum	32	48	58	52	45	34	28	35	54	54	54	69	56	50	67	62	60	67	60	51	58	66	68	71	..	..	77	69	64	65	60	[b]56.6
	Minimum	3	15	27	42	20	14	11	1	23	41	44	52	27	28	45	50	31	37	43	32	30	34	37	43	..	..	38	52	42	33	38	[b]32.2
Frankfort	Maximum	39	47	57	55	48	27	23	36	52	51	55	70	47	55	68	66	53	58	62	52	58	65	67	70	73	68	74	74	69	68	72	57.4
	Minimum	16	25	25	45	20	15	12	11	24	42	46	45	29	26	40	46	35	35	44	33	33	34	36	44	54	58	38	55	46	39	40	35.2
Franklin	Maximum	37	50	57	52	35	32	26	39	55	52	60	68	65	64	68	64	58	64	69	55	64	68	67	72	69	69	79	78	71	71	64	59.4
	Minimum	10	25	33	32	23	17	9	14	28	45	47	42	32	31	51	46	36	42	47	32	33	41	41	48	58	55	49	54	41	44	40	37.2
Greensburg	Maximum	37	50	59	57	57	27	27	37	54	54	56	70	47	63	67	66	58	65	61	53	62	68	68	73	73	68	79	75	71	68	70	59.4
	Minimum	4	15	23	45	20	12	10	9	21	42	46	45	27	22	49	47	31	38	49	32	32	30	32	43	57	55	35	53	44	30	30	33.4
Irvington	Maximum	40	50	57	50	42	27	23	38	52	51	57	65	49	60	64	63	55	61	59	52	61	66	67	70	70	66	78	77	70	67	70	57.3
	Minimum	14	27	30	42	19	15	10	13	29	46	48	49	29	28	49	46	36	38	41	31	38	40	47	51	59	55	41	56	42	45	47	37.5
Junction City	Maximum	38	48	58	50	46	25	21	36	53	53	61	70	46	58	68	64	57	65	61	51	58	61	67	70	72	68	78	72	65	67	69	57.3
	Minimum	8	19	22	42	21	14	10	−1	23	43	45	46	27	28	44	45	47	34	43	32	32	28	29	38	52	52	34	48	44	33	35	32.9
Leitchfield	Maximum	39	48	57	53	30	28	24	38	52	50	57	61	39	61	66	59	56	64	60	52	62	67	67	69	72	69	78	77	65	69	69	56.7
	Minimum	10	23	30	32	18	15	9	12	25	44	47	38	32	32	55	44	33	39	40	31	37	36	39	56	60	55	40	55	42	39	44	35.9
Lexington	Maximum	35	47	58	51	26	19	18	33	52	53	57	65	32	55	67	60	52	58	58	48	56	66	66	70	71	65	75	70	54	64	68	53.8
	Minimum	14	25	37	26	19	12	9	11	27	43	46	32	24	29	47	44	36	33	34	30	38	45	48	48	57	52	49	54	44	42	49	35.6
Louisville	Maximum	42	48	57	50	26	26	21	37	51	52	62	62	37	58	65	63	53	56	56	53	61	66	67	69	70	65	78	76	66	67	70	55.8
	Minimum	19	29	34	25	18	14	10	14	30	48	49	33	27	30	54	43	37	37	35	32	41	43	49	50	58	53	49	55	41	46	52	37.4
Do. (Cherokee Park)	Maximum	42	50	57	56	48	25	25	39	53	51	51	62	42	58	66	65	53	56	57	53	61	68	68	70	70	67	79	77	71	69	72	57.5
	Minimum	16	25	27	43	20	13	10	12	27	46	47	41	28	26	48	45	36	35	43	31	34	36	40	48	56	56	39	55	44	42	45	35.9
St. John	Maximum	40	49	55	50	35	29	22	36	50	50	55	65	60	55	55	70	58	58	61	62	70	67	67	68	68	72	78	78	78	70	69	57.7
	Minimum	35	40	30	25	20	9	9	9	25	33	38	30	29	27	25	33	32	36	42	42	33	40	38	40	38	40	36	37	42	35	40	31.9
Scott	Maximum	48	49	55	48	41	25	23	35	51	48	55	61	40	53	65	60	50	52	57	51	60	65	68	70	71	67	73	72	66	69	72	55.6
	Minimum	17	25	28	42	18	12	11	10	27	40	43	40	23	25	40	45	33	30	38	30	29	39	42	46	53	54	38	52	43	40	45	34.1
Shelbyville	Maximum	40	41	49	50	39	26	23	34	47	47	53	53	43	57	62	62	49	53	58	52	56	60	60	63	64	65	68	74	68	69	71	53.5
	Minimum	7	19	26	34	15	9	6	5	20	38	41	39	23	22	41	41	29	30	37	27	28	35	38	41	51	52	35	50	38	33	40	30.6
Taylorsville	Maximum	39	57	57	51	46	24	24	36	52	50	55	66	42	58	68	63	54	58	60	52	59	65	66	71	71	68	76	75	67	68	71	56.7
	Minimum	7	21	24	44	20	13	10	9	23	43	45	40	27	24	39	45	33	35	40	31	30	32	34	44	53	57	35	53	44	35	37	33.1
Williamstown	Maximum	44	51	58	49	44	38	33	35	51	48	53	61	48	57	66	64	54	54	59	59	62	68	69	80	72	68	76	72	68	68	69	58.0
	Minimum	14	24	27	41	18	13	10	8	25	43	43	41	24	25	40	43	33	30	39	31	32	39	42	45	51	55	44	52	46	41	40	34.4
Eastern Division.																																	
Ages	Maximum	55	58	62	55	48	49	28	37	52	56	55	72	69	55	68	..	63	71	65	55	61	68	70	73	73	..	79	68	62	67	68	[b]60.8
	Minimum	15	21	28	48	23	19	16	5	19	32	46	52	29	25	50	..	40	35	50	32	31	31	31	36	58	..	38	47	51	31	34	[b]33.2
Beattyville	Maximum	42	55	65	46	46	28	25	40	57	53	57	57	55	60	70	62	51	51	52	52	66	73	75	80	79	71	83	74	72	71	75	59.5
	Minimum	6	15	30	30	24	17	15	0	17	33	42	52	25	20	30	51	33	32	45	34	29	28	28	30	45	58	34	42	48	29	30	30.7
Berea	Maximum	39	49	58	52	37	23	19	36	56	54	57	71	58	50	69	64	58	64	63	61	60	69	70	76	75	68	79	71	66	67	72	58.4
	Minimum	21	22	27	37	21	15	10	4	26	43	43	40	25	30	46	49	36	35	37	32	32	33	36	49	58	52	41	55	43	38	49	35.0
Catlettsburg	Maximum	40	48	59	58	49	26	26	35	52	52	60	74	66	70	68	58	53	67	66	49	57	65	70	72	73	78	73	74	69	68	74	59.6
	Minimum	10	24	25	37	24	17	17	11	25	34	34	53	25	35	46	39	33	42	41	32	20	32	34	36	34	49	39	45	51	38	38	33.2
Farmers	Maximum	39	53	60	58	47	26	21	36	54	53	57	59	59	57	70	67	58	60	63	52	61	66	73	72	74	74	72	73	71	67	74	59.0
	Minimum	3	15	21	32	22	15	14	0	22	33	11	52	27	24	34	48	34	46	31	43	29	31	43	45	47	62	39	53	50	37	44	33.5
Maysville	Maximum	43	50	55	55	46	28	25	36	51	52	57	68	51	56	70	62	55	58	63	54	61	63	77	71	78	72	71	74	69	71	75	58.7
	Minimum	15	24	26	36	22	15	15	9	27	41	44	52	28	26	33	48	36	32	42	32	31	34	36	43	48	59	41	51	46	38	42	34.6
Middlesboro	Maximum	33	51	58	55	45	30	29	36	57	58	54	72	65	55	68	66	62	70	65	59	60	67	69	72	76	78	73	74	63	69	68	60.1
	Minimum	14	18	23	39	24	18	17	5	16	30	41	30	29	26	47	54	41	34	52	33	28	28	29	32	52	35	56	44	52	29	31	32.6
Mount Sterling	Maximum	36	46	59	52	45	25	19	35	51	48	58	70	48	54	68	60	53	60	62	49	58	65	69	72	75	67	74	73	65	65	73	56.6
	Minimum	19	20	25	41	20	14	12	6	25	38	43	43	24	36	40	48	34	31	42	31	31	43	42	43	52	57	39	52	43	36	39	34.2
Richmond	Maximum	37	48	61	56	46	24	21	34	53	51	54	70	57	58	69	55	57	64	61	51	60	69	70	74	75	68	79	72	56	67	72	57.7
	Minimum	11	23	30	43	22	16	12	9	26	42	46	53	27	27	46	50	37	34	46	32	25	38	46	46	56	57	45	52	44	40	47	36.7
Williamsburg	Maximum	41	55	62	62	51	31	29	42	57	60	58	76	74	62	70	68	63	70	66	55	52	70	71	75	74	71	82	79	68	69	67	62.3
	Minimum	8	18	25	35	23	12	15	8	19	31	45	52	29	26	39	57	41	35	52	34	33	29	32	37	52	57	38	50	49	31	36	34.0

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[1] [2] [3] etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, March, 1920.



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CLIMATOLOGICAL DATA

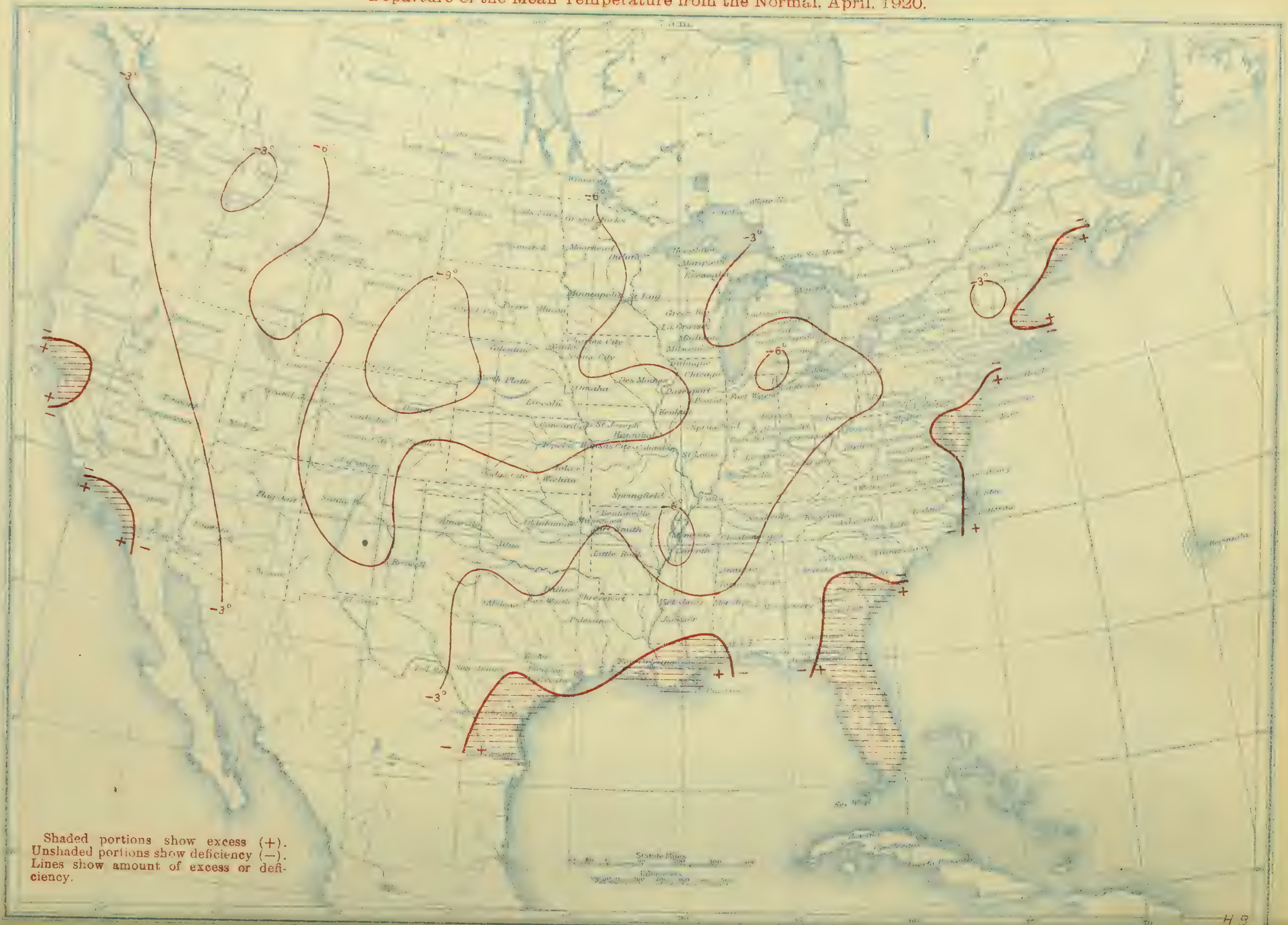
KENTUCKY SECTION

APRIL, 1920.

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JUNE 28, 1920.

Departure of the Mean Temperature from the Normal, April, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

VOL. XXV. LOUISVILLE, KY., APRIL, 1920. No. 4

GENERAL SUMMARY.

Weather conditions were more characteristic of March than of April. Only once during the past 31 years has a lower average temperature been recorded for April; while the wind movement was the largest on record for this month. Precipitation was abnormally heavy, and so frequent that there were only about three days without appreciable precipitation somewhere in the State. This combination of abnormal conditions was exceptionally unfavorable for farming, gardening, and all outdoor activities. Except on a few days the soil was too wet to be worked, and unusually slow progress was made with preparation for corn and tobacco. For this reason a considerable acreage of wheat was allowed to stand, that would have been plowed for corn if weather conditions had been more favorable. Some corn was planted in the southern counties, but under conditions decidedly unfavorable for germination. Very little progress was made with gardening.

During the first two weeks minimum temperatures near or below freezing were registered nearly every day, the last freeze and killing frost occurring on the 14th. These freezes caused considerable injury to pears and early peaches, but most fruit was sufficiently dormant to escape serious damage. At the close of the month prospects were favorable for a fair to good crop of most fruits. Wheat and rye made some progress, but continued poor and unpromising.

PRESSURE.

The main pressure feature was the constant procession of low pressure areas that followed each other in rapid succession across the central valleys, moving generally from the southwest to the Lake region and passing over this State in their course. Heavy rains attended the passage of the following "lows": 1st-2d; 3d-5th; 11-12th; 18th-21st; and 25-27th; while moderate showers accompanied those of the 6th; 15-17th, and 29-30th. High pressure areas were generally weak in development, but decidedly cold, especially during the first two weeks.

The mean sea-level pressure, based on the records of two stations, was 29.86 inches. The extremes were 30.22 inches on the 24th and 29.24 inches on the 4th, both at Louisville.

TEMPERATURE.

The average temperature for the month, 40 stations reporting, was 50.8°, which is 5.1° below normal. With the exception of April, 1907, when the average temperature was 48.2°, this is as low as ever recorded for this month since 1889. Daily mean temperatures were below normal during about three weeks, the deficiency ranging from 5° to 21° on about 15 days. Minimum temperatures in the period 3rd-14th ranged generally between 22° and 39° on most days. During the third week maximum temperatures of 70° to 80° occurred on a few days, but the last week was cold with minima again in the 30's on the 28th and 29th. The extremes were 89° at Williamsburg on the 22d, and 22° at Scott on the 13th.

PRECIPITATION.

Precipitation for the State, determined from reports of 57 stations, averaged 6.16 inches, which is 2.22 inches above normal The principal rain periods were: 1st-2d; 4-7th; 12-13th; 16-17th; 19-21st; 25-30th. Heavy rains occurred on the 1st, 12th, 20th, and 21st quite generally over the State; and also on the 26th in many localities. Over central and northern counties amounts ranged between 6 and 8 inches; and over the extreme western and mountain counties between 3.50 and 6 inches.

As in March preceding, the heaviest precipitation occurred mainly over the agricultural districts. At the various stations monthly totals ranged between 3.40 inches at Jackson and 9.35 inches at Junction City. Thunderstorms were frequent during the first and second decades, and were attended in many localities by hail.

WIND.

The total wind movement at Louisville was 11,260 miles, and at Lexington 12,852 miles, with average hourly velocities of 15.6 and 17.8 miles, respectively. The maximum velocity for five minutes was at the rate of 52 miles per hour on the 4th at Louisville and 60 miles per hour on the 6th, at Lexington, from the southwest at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 12 noon 61 per cent, and at 7 p. m. 69 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 48 and at Lexington 38.

MISCELLANEOUS

April 4.—A residence was damaged by lightning in Green County. Damage by a windstorm in Lincoln County, which destroyed 33 houses, was estimated at $100,000.

April 19-21.—Widespread damage was caused by hail, wind, and heavy rain in Bourbon, Fleming, Montgomery, Caldwell, and Mercer Counties; also in many other localities between the lower Cumberland and the northeast border counties. Green-

COMPARATIVE DATA FOR APRIL.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain.
1889	57.0	+ 1.1	89	24	1.61	−2.33	..
1890	57.0	+ 1.1	92	28	4.04	+0.10	..
1891	58.0	+ 2.1	92	24	2.52	−1.42	..
1892	56.0	+ 0.1	88	22	7.12	+3.18	..
1893	58.0	+ 2.1	94	21	6.99	+3.05	..
1894	56.0	+ 0.1	94	23	3.54	−0.40	..
1895	57.2	+ 1.3	94	22	3.18	−0.76	9
1896	63.6	+ 7.7	96	24	1.65	−2.29	6
1897	55.5	− 0.4	90	25	6.03	+2.09	11
1898	52.4	− 2.5	86	19	3.38	−0.56	9
1899	57.2	+ 1.3	96	20	3.16	−0.78	9
1900	56.2	+ 0.3	90	15	2.15	−1.79	8
1901	50.9	− 5.0	91	23	4.01	+0.07	10
1902	54.2	− 1.7	93	22	2.65	−1.29	9
1903	55.4	− 0.5	90	22	4.43	+0.49	12
1904	50.8	− 5.1	85	16	2.83	−1.11	11
1905	56.7	+ 0.8	91	23	3.00	−0.94	9
1906	59.5	+ 3.6	94	23	1.40	−2.54	6
1907	48.2	− 7.7	87	19	2.78	−1.16	11
1908	59.8	+ 3.9	89	25	6.56	+2.62	14
1909	56.1	+ 0.2	96	21	5.98	+2.04	10
1910	55.4	− 0.5	88	23	5.14	+1.20	14
1911	53.8	− 2.1	90	20	7.06	+3.12	14
1912	58.4	+ 2.5	87	25	7.90	+3.96	12
1913	55.3	− 0.6	89	27	2.73	−1.21	10
1914	55.7	− 0.2	91	13	3.62	−0.32	10
1915	60.1	+ 4.2	96	17	0.96	−2.98	5
1916	54.0	− 1.9	89	23	2.64	−1.30	9
1917	55.8	− 0.1	90	19	5.02	+1.08	8
1918	53.9	− 2.0	87	25	4.07	+0.13	12
1919	56.7	+ 0.8	89	19	3.51	−0.43	10
1920	50.8	− 5.1	89	22	6.16	+2.22	13

Climatological data for April, 1920.

				Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.					
Stations.	Counties.	Elevation, feet.	Length of record, years.	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.	Prevailing direction of wind.	Observers.
Western Division.																				
Beaver Dam	Ohio	441	17	55.0	−0.4	85	24	27	5†	42	6.32	+2.21	1.68	0.5	17	12	2	16	nw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	54.9	−2.3	81	18	26	5	31	3.75	−0.78	1.62	T.	9	8	10	12	sw.	E. W. Horr.
Calhoun	McLean	437	16	54.2	−3.8	82	22	25	5	36	6.27	+1.79	1.72	T.	13	7	13	10	nw.	W. A. Taylor.
Earlington	Hopkins	420	29	54.6	−2.7	82	21†	26	5	38	6.17	+1.80	1.55	T.	11	11	2	17	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	54.8	.....	82	22	25	5	37	6.96	.....	2.50	.....	17	10	14	6	n.	C. R. Lovell.
Henderson	Henderson	327	12	.....	.....	.....	.....	.....	.....	.....	3.65	+0.22	0.95	T.	10	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	23	55.2	−1.6	84	21	25	5†	38	5.35	+1.00	2.21	T.	10	11	3	16	w.	W. E. Graves.
Marion	Crittenden	571	21	55.1	−2.2	80	18	25	5	38	3.47	−1.11	1.68	T.	5	13	7	10	nw.	B. C. Paris.
Mayfield	Graves	364	10	53.6	−3.6	82	18	26	5	33	5.72	+1.58	1.03	T.	10	6	12	12	s.	J. N. Davis.
Owensboro	Daviess	479	23	53.8	−1.4	80	21	26	5	34	4.11	+0.01	1.08	T.	12	10	8	12	sw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	53.6	.....	80	21	25	5	33	5.26	.....	2.18	T.	12	14	4	12	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	.....	.....	.....	.....	.....	.....	4.76	+0.43	1.62	T.	10	.....	.....	.....	.....	Frank L. Brown.
Princeton	Caldwell	529	10	55.4	−2.8	81	18†	26	5	40	4.84	+1.27	2.01	T.	14	10	12	8	s.	Ray Baker.
Russellville	Logan	590	6	53.4	−4.4	83	18†	27	5†	40	7.95	+2.92	2.80	T.	11	15	5	10	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Taylor Davis.
Anchorage	Jefferson	700	19	^{a}49.8	−3.4	77^{a}	21	24	6	40^{a}	5.10	+1.10	1.49	T.	11	11	3	16	sw.	C. E. Barret.
Bardstown	Nelson	637	23	53.5	−1.8	85	22	27	6	42	5.55	+1.68	1.35	T.	14	16	4	10	w.	Chas. M. Talbott.
Bowling Green	Warren	500	29	56.3	−1.8	88	22	28	5	43	7.48	+3.22	2.50	0.5	14	6	12	12	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	.....	.....	.....	.....	.....	.....	8.07	.....	2.47	T.	17	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	27	.....	.....	.....	.....	.....	.....	.....	5.56	+1.36	1.60	T.	8	.....	.....	.....	.....	F. E. Bradshaw.
Camp Knox	Hardin	.....	0	50.6	.....	82	22	27	5	36	5.33	.....	1.66	T.	16	4	11	15	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	.....	.....	.....	.....	.....	.....	.....	8.12	+4.94	4.32	.....	15	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	.....	.....	.....	.....	.....	.....	7.17	.....	1.35	0.4	17	.....	.....	.....	.....	W. A. Cockerill.
Eubank	Pulaski	1177	25	52.6	−1.2	84	22	24	14	43	7.24	+3.19	2.43	T.	11	9	6	15	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	53.2	−2.1	83	22	29	5†	36	8.16	+4.43	1.90	T.	16	14	0	16	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	55.7	−3.4	83	18	27	5	37	9.17	+4.56	3.10	T.	12	11	10	9	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	27	53.8	−1.2	83	18†	24	6†	44	8.44	+4.59	2.09	T.	17	5	5	20	sw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	.....	.....	.....	.....	.....	.....	6.83	+3.14	1.90	T.	14	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	53.1	−2.4	82	22	27	5	35	6.01	+1.99	1.83	T.	13	7	8	15	sw.	W. J. Piggott.
Junction City	Boyle	985	26	52.8	−1.7	85	22	25	14	43	9.35	+5.64	1.85	0.1	20	3	20	7	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	53.2	−2.2	82	22	26	5	38	5.81	+1.73	1.71	T.	12	10	12	8	sw.	John E. Stone.
Lexington	Fayette	989	32	49.7	−4.0	82	22	26	5	35	6.42	+3.03	2.02	0.1	14	7	6	17	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	51.2	−5.0	82	22	26	13	35	5.16	+1.09	2.37	T.	11	5	11	14	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	52.9	−3.0	84	22	27	5†	37	4.77	+0.49	1.44	T.	13	7	12	11	sw.	Wm. I. Hunt.
St. John	Hardin	777	23	52.0	−2.4	82	22	27	5	38	5.70	−1.83	2.10	T.	14	13	2	15	.....	Sisters of Loretto.
Scott ¶	Kenton	900	22	49.0	−4.1	82	22	22	13	36	6.05	+2.87	2.26	4.2	15	1	13	16	sw.	E. B. Wilson.
Shelbyville	Shelby	825	31	49.4	−5.3	82	22	23	6	38	5.98	+2.26	1.43	T.	17	6	9	15	w.	F. A. Miller.
Taylorsville	Spencer	489	17	51.4	−3.0	83	22	27	5†	38	6.10	+1.63	1.78	0.1	17	7	7	16	sw.	E. D. Bourne.
Williamstown	Grant	943	17	51.0	−1.3	82	22	25	6†	38	6.21	+3.11	2.03	2.3	15	7	13	10	.....	Miss Rose Carter.
Woodbury	Butler	533	2	.....	.....	.....	.....	.....	.....	.....	6.66	.....	1.88	T.	15	.....	.....	.....	.....	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	^{a}55.4	.....	^{a}88	22	^{a}23	6	^{a}44	5.49	.....	1.12	T.	12	9	7	14	sw.	S. A. Driver.
Ashland	Boyd	534	13	53.2	.....	88	22	29	6†	40	5.98	.....	1.34	.....	14	9	9	13	w.	Forester Farley.
Beattyville	Lee	650	16	54.1	+0.2	82	18	24	6	41	4.17	−0.10	0.80	T.	15	5	1	24	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	^{a}54.0	−1.3	^{a}84	22	^{a}24	14	^{a}37	6.71	+3.02	1.92	T.	8	^{a}8	^{a}6	^{a}15	s.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	.....	.....	.....	.....	.....	.....	.....	8.20	.....	2.50	T.	9	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	.....	.....	.....	.....	.....	.....	5.68	+2.21	2.21	T.	14	8	8	14	se.	J. V. Oldham.
Farmers	Rowan	668	12	.....	.....	.....	.....	.....	.....	.....	6.52	+2.52	1.30	T.	16	8	8	14	w.	Miss Catherine Evans.
Jackson	Breathitt	776	8	.....	.....	.....	.....	.....	.....	.....	3.40	−0.12	1.05	T.	8	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	5	.....	.....	.....	.....	.....	.....	.....	5.66	.....	1.47	T.	12	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	16	.....	.....	.....	.....	.....	.....	.....	4.58	+1.36	1.15	T.	13	.....	.....	.....	.....	Miss Carrie S. Adams.
Maysville	Mason	524	22	52.1	−1.5	84	22	26	6	37	7.78	+4.35	2.20	T.	13	9	3	18	w.	Harry M. Robinson.
Middlesboro	Bell	1128	21	56.0	−0.2	87	18	24	14	43	6.15	+1.36	1.35	0.0	14	17	10	3	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	30	51.4	−2.2	84	22	25	6	38	7.87	+3.95	1.82	T.	17	10	8	12	w.	W. R. McKee.
Oliver	Greenup	.....	0	.....	.....	.....	.....	.....	.....	.....	6.39	.....	2.35	T.	15	.....	.....	.....	.....	Percy Humphrey.
Pikeville	Pike	634	14	.....	.....	.....	.....	.....	.....	.....	5.38	+1.77	1.22	0.0	8	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	25	53.6	−1.9	85	22	27	6	39	6.49	+2.88	1.59	T.	15	11	0	19	.....	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	.....	.....	.....	.....	.....	.....	7.99	.....	3.05	T.	17	.....	.....	.....	.....	Samuel Johnson.
Williamsburg	Whitley	939	22	56.8	+1.1	89	18	25	14	47	5.71	+1.31	1.40	T.	10	7	13	10	w.	D. B. Bradley.
State averages and extremes		.....	.....	50.8	.....	89	18	22	13	47	6.16	.....	4.32	0.2	13	9	8	13	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

¶ Post-office address, Covington, Ky

houses, trees, and early plants were injured, and chickens and young lambs killed. Barns, fences, and bridges along creeks were washed away, and roads and plowed fields were badly damaged. A farmer was killed and his wife severely shocked by lightning in Letcher County. Intense darkness, almost like night, accompanied these storms at Louisville and many other places.

Rivers.—The Ohio continued above flood stage at Cairo until the 17th, but moderate stages prevailed above Evansville until the 20th when a rapid rise set in due to the rains of the 19th-21st. The heaviest rainfall occurred comparatively near the main stream, and over the Licking basin, resulting in unusually rapid rises. Flood stage was reached at Cincinnati and Fern

Daily Precipitation for April, 1920.

Stations.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Western Division.																																
Beaver Dam ‖ G.	1.00	.20		.60	.05		.22					.42	.15			.28	.07		.09	.23	1.68				.02	1.00	.06	.05	.20			6.32
Blandville M.	1.62		.08	.20		.10						1.16			.04					.33					.12		T.		.10			[illegible]
Calhoun G.	1.32	.12	.12	.43	.01	.09		T				1.45			T.	.11			T.	1.72	.08				T.	.45	T.		.25	.09		[illegible]
Earlington ‖ G.	1.55			.63	T.	T.	.14		T			.75	.16			.18	.07			1.30	.71				T.	.54			.14			6.17
Greenville G.	1.29	.01	.16	.40	.03	.05	.16		.03			.47				.41			.03	2.50					.05	1.00	.01		.20	.16		[illegible]
Henderson ‖ O.	.95	.15		.22	T.	T.	.16					.80	T			.10				.20	.52					.30			.25			3.65
Hopkinsville ‖ C.	2.21	T.		T.	T.	T.	.11					.28	.08			.16				.19	.89				.06	1.28			.09	T.		[illegible]
Marion O.	.69			.18	T.							.76				.16				1.68							[illegible]		[illegible]	T.		3.47
Mayfield ‖ M.	1.00			.70	T.		.20					.83				.62				1.03	.50				.21	.50			.13			5.72
Owensboro ‖ O.	.81	.06		.19	.14	T	.12		T.			.50				.06	T.		.06	.30	1.08					[illegible]			.31	[illegible]		4.11
Paducah (Lone Oak) O.	2.18		.05	.16	.06	.03						1.22			.03	.09					.68				.10	.41			.25			[illegible]
Paducah O.	1.62			.26	T.		T.					.88				.18	.08			.56	.50				T.	.44			.06	.18		4.76
Princeton ‖ G.			.12	.50	.01	.08	.01	T.			T.	1.05			T.	.27			.04	2.01	.08				.04	.48			.11	.04		[illegible]
Russellville ‖ G.	2.80	.25		1.09	T.							.11				.27			.45	.25	1.15				.30	1.20			.08	T.		7.95
Central Division.																																
Alpha C.																																
Anchorage O.	.63	.07	.02	.37	T.	.37						.71	.01		T.	.26			.80	1.49						.37						5.10
Bardstown ‖ S.	1.23	.15		.68	T.		.25		.02			.10	.18			.10	.05			.23	1.35					.35	.68			.18		5.55
Bowling Green ‖ G.	2.50	.32	.02	1.00	T.	T.	.05		.05			.25	.16			T.	.32			.05	.96					1.63	.07		T.	.10		7.48
Brownsville ‖ G.	2.47	.21		.67	T	T.	.23	.03				.16	.21			.17	.01		.05	.03	1.65					1.58	.19	.06	.14	.21		8.07
Burnside ‖ C.	1.60	1.29		.38	T.	T.	.55					T.	.18			T.	.48				.32					.76	T.	T				5.56
Camp Knox¶ O.	1.12	.07		.51	.08	.04	.27		.01		T.	.59	.05	T.	T.	.12	T.	T.	.02	1.66	.07				T.	.54	.02	T.	.16	T.		5.33
Carrollton ‖ (Lock No. 1) O.	.22	.04		.21		.02	.15					.11	1.05			.03	.28		.04	4.32	1.54			.01		.05	T.	.05				8.12
Cloverport ‖ O.	1.17	.29		.19	.07	.02	.22		T.			1.35	.36			.09	.08		.21	1.30	1.08			T.		.50	.02	T.	.19	.03		7.17
Eubank ‖ C.	.92	.94		.92			.39					.27	.25				.03				2.43					.68	.25			.16		7.24
Frankfort ‖ K	.74	.20		.79	T.	.02	.53					.13	.23			.07	.06		1.27	1.51	1.90					.24	.42	T.	.04	.01		8.16
Franklin G.	3.10			.80	T	T.	.20					.22				.15			.48	1.38	.41				.34	1.62	.30			.17		9.17
Greensburg ‖ G.	1.70	.45		.49	.05		.45					.18	.30			.13	.07		.11	.09	2.09			T.		1.14	.94	.02	.06	.17		8.44
High Bridge ‖ K.	.81	.33		.60		T.	.38					.16	.19			.03	.20			.56	1.90					.42	1.12		.02	.11		6.83
Irvington O.	.91	.25	T.	.37	T.	.08	.17	T.	T.			1.00	.01			.18		T.	.28	1.83	.04				T.	.55	T.		.34	T.		6.01
Junction City K.	1.85	.25	.03	1.36	.10	.12	.56		.03			.54	T.		T.	.10	.05		.24	1.80	.40		.39		.05	1.10	.15		.16	.07		9.35
Leitchfield G	1.71		*	.67	T.	.23						.37				.16				1.30	.07					.91	.05		.25	.09		5.81
Lexington *** K	.95	T.	.22	.26	.04	.40						.34			T.	.40		T.	.19	1.83	.19	.01				1.44	.05		.10	T.		6.42
LOUISVILLE*** O.	.64	.10	.24	.04	T.	.13		T.				.86	T.		T.	.24		.13	.33	2.13		T.				.32			T.			5.16
Do. (Cherokee Park) O.	.68	.21		.04		T.	.34					.47	.33		T.	.25	.10	.10	.35	1.44	.08				T.	.38			T.			4.77
St. John ‖ S.	1.39	.12		.70	T.	T.	.21					.10	.20			.08	T.		02	.12	2.10					.30	.15		.15	.06		5.70
Scott L	.18	.03		.23	.02	.29	T.					.35	.42		T.	.20	.01	T	.88	2.26	.85		T.			.27	.03	T.	T.	.03		6.05
Shelbyville ‖ S.	.54	.17		.20	.36		.27					.16	.40			.28	.05		.54	1.43	.67	.14				.16	.39	.02	T.	.20		5.98
Taylorsville S.	1.06	.24	.01	.63	.01	.09	.23	T.				.27	.11		T.	.11	.03	T.	.46	1.78	.17				T.	.69	.12		.09	T.		6.10
Williamstown ‖ L		.28		.38	T.	.03	.26		.08			.11	.45			T.	.40		.03	1.70	2.03			T.			.40	.02	01	.03		6.21
Woodbury ‖ G	1.88	.07		.68	T.	T.	.16	T.				.13	.17			.12	.12		.11	.17	1.46					1.34	.03		.15	.07		6.66
Eastern Division.																																
Ages K.	.82	1.12		.46	.05	T.	.40					.43	.08				T.			.32	.33				T.	.82	.03		T.	.63		5.49
Ashland O.	.12	.33	.08	.50	.42		.57						.42				.09			1.20	1.34		.12				.44	.24		.11		5.98
Beattyville ‖ K	.60	.80		.40	.10		.40		.05				.21	T.		T.	.04		T.	.24	43					.52	.13	.17	.03	.05		4.17
Berea K	1.20			1.00	T.	T.						.97			T.	T.					1.92					1.40	.05		.11	.06		6.71
Cynthiana ‖ L.	.70	.25		1.00	T.	T.	.45	T.				T.	.35				.15	T.	T.	2.50	2.25				T.	T.	.55			T.		8.20
Falmouth ‖ L.	.32	.02		.39	T.	T.	.27					.14	.31			.06	.15		.03	1.35	2.21					.10	.31	.02				5.68
Farmers L.	.70	.10		.83	T.	.10	.50					.36				.14			.40	.61	1.30	.15				.19	.80	.11	.11	.12		6.52
Jackson ‖ K.	.45	1.05		.10	T.		.12		T.				.33			T.	T.				.80				.45	T.		.10		T.		3.40
London ‖ C.	1.35	1.47			T.	.10	.30						.20			.05	.55			.05	.55					.70	.10	.24				5.66
Louisa ‖ B.	.33	.61		.43	.17	.01	.48						.31			T.	.24			.20	1.15		T.			T.	.48	.03		.14		4.58
Maysville ‖ O.	.25	.27		.62	T.	T.	.50	T.				.12	[illegible]			[illegible]	.51			[illegible]	2.20						[illegible]	.20		.10		7.78
Middlesboro C	1.35	1.34		.52	[illegible]		[illegible]					.56				[illegible]	.30			.20	.31				.20	[illegible]	.02		[illegible]			6.15
Mount Sterling ‖ L.	.45	.44	.21	.66	[illegible]	[illegible]	[illegible]	T.				T.	[illegible]			[illegible]	[illegible]		T.	1.82	[illegible]		[illegible]			[illegible]	.65	[illegible]		.15		7.87
Oliver O	[illegible]	.17	[illegible]	.35	.20	[illegible]	.54						.30				[illegible]			1.15	2.35		.04			T.	.60	.16		.10		[illegible]
Pikeville ‖ B	[illegible]	1.22		[illegible]			[illegible]						.62				T.				.86					[illegible]	[illegible]	T.				5.38
Richmond K	[illegible]	.81		.83	[illegible]	[illegible]	[illegible]					[illegible]	.30			T.	[illegible]		[illegible]	.24	[illegible]				T.	[illegible]	.60			.07		6.49
Vanceburg ‖ O	.46	[illegible]			[illegible]	[illegible]	[illegible]					.01	[illegible]	[illegible]			[illegible]		.07	2.00	3.05			.02		.14	.35	[illegible]		[illegible]		[illegible]
Williamsburg ‖ C	[illegible]	[illegible]		[illegible]	T.	T.	.33						[illegible]			[illegible]	.14		[illegible]											[illegible]		5.71

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the **time of** observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning, and amount thus recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of rains not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; **(T) Tennessee**; (O) Ohio; (M) Mississippi.

¶ Precipitation for 24 hours ending at 5 p.m.

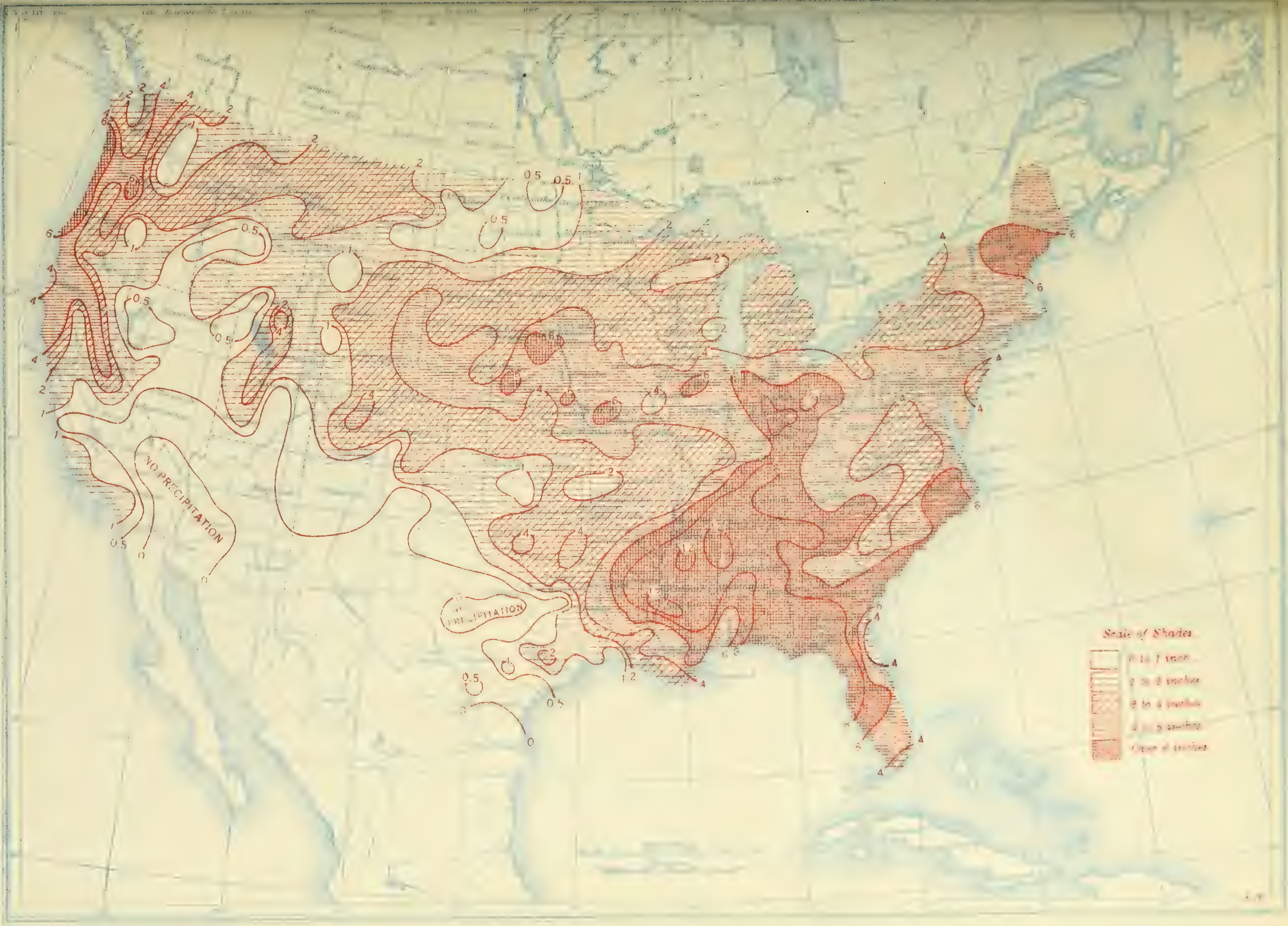
Bank on the 22d, from Cloverport to Evansville on the 23d, at Louisville on the 24th, and at Cairo on the 25th. Crests at Cincinnati, Fern Bank, and Louisville were slightly above flood stage; while flood stage was not quite reached at Madison. In the lower river crests were several feet above flood stage. The flood subsided rapidly in the upper reaches, but the river was still above flood stage at Evansville and Cairo at the end of the month. The most important effect of this flood was the delay of two to three weeks in plowing and planting the bottoms in the western part of the State.

Daily temperatures for April, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	65	62	57	68	46	55	51	58	57	58	75	66	57	61	72	73	75	81	80	74	81	83	74	85	57	68	63	62	71	75	..	67.0
	Minimum	55	46	32	45	27	28	30	31	35	29	33	43	*28	27	45	55	40	50	59	60	56	66	54	50	48	50	45	36	41	55	..	43.1
Blandville	Maximum	71	62	62	54	42	60	52	65	57	59	70	63	48	59	70	76	69	81	80	73	79	79	70	68	57	67	59	63	68	79	..	65.4
	Minimum	55	39	36	30	26	37	35	41	39	34	39	38	29	32	49	49	41	57	69	58	51	63	53	44	48	51	44	39	50	57	..	44.4
Calhoun	Maximum	67	61	68	65	43	53	58	58	59	61	71	65	48	61	71	72	69	79	77	73	79	82	71	72	56	68	64	64	72	76	..	66.1
	Minimum	54	43	35	42	25	30	31	35	34	31	35	42	27	29	45	51	40	50	58	60	45	62	52	43	48	50	36	37	42	52	..	42.3
Earlington	Maximum	67	61	66	66	39	55	56	66	57	59	74	65	47	61	72	74	70	80	79	72	82	82	69	68	55	67	60	63	72	76	..	66.0
	Minimum	55	44	32	36	26	33	31	33	36	29	36	39	28	28	49	50	41	52	65	60	49	64	55	49	48	53	44	35	42	52	..	43.1
Greenville	Maximum	66	64	65	72	47	55	56	59	54	55	72	71	50	58	71	73	67	79	78	75	79	82	76	62	59	68	64	61	72	77	..	66.2
	Minimum	53	44	31	45	25	31	31	33	37	32	35	47	27	26	46	56	39	51	62	60	49	65	54	48	47	50	45	34	45	55	..	43.4
Hopkinsville	Maximum	63	61	67	67	45	57	57	66	60	61	76	67	46	63	74	76	71	83	78	74	84	83	73	70	60	66	62	64	75	80	..	67.6
	Minimum	54	44	32	42	25	30	29	34	38	31	38	32	29	25	45	57	41	55	65	65	49	49	53	44	48	51	46	33	46	50	..	42.7
Marion	Maximum	70	70	64	55	41	53	54	61	61	70	73	70	47	58	70	74	67	80	79	73	79	78	68	67	59	66	65	65	70	75	..	66.1
	Minimum	54	41	35	36	25	31	32	38	36	32	44	47	27	32	49	54	40	51	65	58	48	64	52	46	48	49	42	37	50	59	..	44.1
Mayfield §§	Maximum	69	54	62	62	48	59	52	65	57	59	71	53	47	59	71	74	73	82	79	64	79	79	70	67	56	63	56	63	72	78	..	64.8
	Minimum	38	40	35	43	26	27	32	37	39	33	38	47	29	31	38	55	41	55	58	60	48	54	53	42	48	48	45	37	39	53	..	42.3
Owensboro	Maximum	67	55	62	66	46	52	53	52	54	62	71	65	44	59	71	72	71	75	77	71	80	79	71	69	58	66	64	59	69	74	..	64.5
	Minimum	55	43	37	40	26	31	32	32	31	34	37	42	28	30	41	51	41	51	56	62	51	54	53	50	49	50	45	36	43	55	..	43.0
Paducah (Lone Oak)	Maximum	71	68	66	62	38	42	48	49	50	56	65	68	60	66	71	75	70	78	71	79	80	79	71	61	60	68	66	60	61	66	..	64.2
	Minimum	51	44	38	35	25	35	32	36	38	36	38	38	28	33	36	53	40	61	63	58	50	54	52	45	42	50	44	37	50	51	..	43.1
Princeton	Maximum	75	64	67	66	42	56	56	65	58	60	76	69	47	60	72	76	71	81	80	74	81	80	76	68	65	66	61	61	73	78	..	67.5
	Minimum	62	44	32	40	26	32	30	33	38	33	36	41	37	27	47	56	41	53	60	60	46	58	53	45	49	51	44	32	44	52	..	43.4
Russellville§§	Maximum	62	55	65	70	39	55	53	62	56	57	72	64	50	58	73	72	67	83	77	67	70	83	73	69	65	67	56	61	65	78	..	64.8
	Minimum	46	51	33	41	27	27	31	34	39	32	35	51	29	27	43	49	41	43	56	59	52	50	52	40	45	51	47	37	43	45	..	41.9
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	66	61	61	72	44	42	50	54	54	54	68	63	42	..	69	69	60	71	63	66	77	83	61	58	55	62	58	53	63	73	..	*61.1
	Minimum	53	42	29	44	26	24	28	29	30	27	28	33	26	26	37	52	40	47	49	41	52	57	47	46	40	46	43	35	34	47	..	38.6
Bardstown	Maximum	65	61	65	74	58	51	53	59	56	55	72	67	53	58	69	76	71	76	66	69	79	85	69	58	54	65	64	57	61	75	..	64.7
	Minimum	55	49	32	47	29	27	29	32	35	29	30	53	29	29	40	55	41	42	55	57	54	56	53	48	45	49	48	36	37	48	..	42.3
Bowling Green	Maximum	61	62	70	71	49	55	58	63	56	56	76	67	51	61	74	73	70	86	79	74	84	88	77	70	65	69	66	65	71	78	..	68.2
	Minimum	54	48	34	49	28	30	32	36	41	32	33	50	31	29	43	54	41	59	62	63	52	54	50	50	48	51	47	37	43	51	..	44.4
Camp Knox	Maximum	63	59	63	70	34	46	52	55	54	54	68	61	45	55	68	70	64	73	68	68	77	82	63	57	54	64	57	54	59	73	..	61.0
	Minimum	54	39	32	34	27	30	28	32	34	30	32	30	28	28	43	45	39	46	54	54	52	59	50	46	46	46	43	41	39	46	..	40.2
Eubank	Maximum	61	60	65	73	57	52	50	55	53	51	71	66	51	53	68	71	64	81	80	74	75	84	74	57	55	71	64	55	60	70	..	64.1
	Minimum	52	47	30	37	27	26	29	34	37	28	28	50	30	24	37	52	41	46	58	65	55	50	55	46	43	43	45	35	35	49	..	41.1
Frankfort	Maximum	67	63	62	73	60	48	50	55	53	50	68	68	55	53	69	70	66	72	66	68	74	83	81	57	57	64	63	54	62	74	..	63.5
	Minimum	56	48	34	47	29	29	31	34	36	31	32	53	29	29	38	56	43	49	50	54	55	54	54	48	44	48	49	38	38	49	..	42.8
Franklin	Maximum	60	60	72	72	45	58	54	62	59	55	72	67	50	58	72	76	67	83	78	73	78	82	82	67	62	69	64	59	71	80	..	66.9
	Minimum	52	48	35	45	27	31	30	38	41	32	35	49	30	28	43	52	42	52	65	63	55	60	53	45	47	51	47	37	45	57	..	44.5
Greensburg	Maximum	62	62	67	70	62	53	53	56	57	52	73	70	53	55	71	72	67	83	79	75	77	83	80	68	57	70	65	59	66	72	..	66.3
	Minimum	52	47	29	46	27	24	28	30	38	29	29	51	30	24	35	52	40	47	54	65	53	50	52	47	44	49	47	32	35	49	..	41.2
Irvington	Maximum	65	63	65	70	45	51	51	54	53	53	70	63	45	55	69	71	65	74	71	69	76	82	69	58	56	64	63	56	64	73	..	62.8
	Minimum	55	45	37	45	27	31	32	36	37	31	35	42	28	32	45	54	40	49	55	57	52	61	54	49	47	50	46	37	41	52	..	43.4
Junction City	Maximum	64	65	66	69	62	52	61	58	55	60	70	67	50	54	68	72	69	77	71	73	76	85	80	55	56	69	71	60	57	73	..	65.5
	Minimum	52	48	38	42	27	26	29	32	35	27	27	47	29	25	35	54	41	41	53	55	40	50	54	41	41	47	48	35	32	48	..	40.0
Leitchfield	Maximum	62	60	65	68	47	53	52	54	55	55	70	64	48	56	69	71	67	80	76	73	77	82	70	61	55	66	64	58	65	73	..	63.9
	Minimum	54	45	33	45	26	28	30	32	31	31	32	47	29	31	43	54	39	48	57	60	52	57	54	50	47	50	44	36	39	54	..	42.6
Lexington	Maximum	63	60	62	70	35	49	46	50	48	47	66	65	39	50	66	68	56	70	66	66	73	82	61	54	53	62	58	51	57	70	..	58.8
	Minimum	53	43	42	35	26	28	30	36	34	29	32	30	27	31	42	47	40	46	48	55	55	59	47	46	43	48	40	36	44	45	..	40.6
Louisville	Maximum	65	61	61	67	35	48	49	53	52	53	67	62	42	54	69	69	62	69	65	66	76	82	60	56	55	62	59	53	61	73	..	60.2
	Minimum	55	44	41	32	27	30	33	37	38	32	35	33	26	33	46	45	40	49	52	56	54	60	49	48	47	48	43	39	43	48	..	42.1
Do. (Cherokee Park)	Maximum	66	62	62	69	53	48	50	53	53	53	68	66	50	57	71	73	68	70	65	66	80	84	78	56	55	62	63	53	63	74	..	63.0
	Minimum	61	45	34	47	27	29	31	36	35	29	31	50	27	30	42	55	41	48	51	54	54	59	53	48	45	48	47	38	39	50	..	42.8
St. John	Maximum	61	61	70	69	41	50	53	52	54	55	70	63	43	55	68	70	69	75	74	68	76	82	68	57	52	65	53	57	62	73	..	62.2
	Minimum	53	46	32	40	27	28	28	30	34	29	34	43	28	29	41	54	40	47	54	57	52	60	55	48	46	48	50	36	39	28	..	41.9
Scott	Maximum	66	60	62	65	51	36	47	53	47	45	63	65	37	53	66	60	59	59	55	63	74	82	64	56	54	58	57	51	63	75	..	58.2
	Minimum	54	45	35	40	25	25	27	31	29	27	27	37	22	29	42	53	41	46	47	52	54	55	47	45	40	44	45	40	38	51	..	39.8
Shelbyville	Maximum	63	61	62	71	55	45	48	54	52	52	64	65	47	52	63	65	64	70	66	66	69	74	82	56	54	61	61	53	65	72	..	62.1
	Minimum	50	40	30	45	24	23	25	28	30	24	26	43	24	21	35	49	37	43	45	49	48	54	46	44	40	41	49	33	35	46	..	37.8
Taylorsville	Maximum	66	61	61	71	50	49	50	56	50	50	67	67	45	54	70	70	66	71	66	67	75	83	76	56	55	63	60	54	61	73	..	61.1
	Minimum	53	46	31	46	27	27	29	31	35	28	29	44	28	27	36	54	41	48	48	55	53	55	51	48	43	48	48	26	34	45	..	40.8
Williamstown	Maximum	73	61	64	68	55	47	49	50	53	49	67	66	52	53	67	63	61	65	57	61	76	82	80	71	55	60	59	55	53	74	..	61.5
	Minimum	54	43	36	43	26	25	28	30	30	26	29	50	25	28	40	52	40	47	48	51	53	57	50	44	40	43	46	38	39	50	..	40.4
Eastern Division.																																	
Ages	Maximum	..	69	66	74	72	54	52	58	61	60	73	64	54	55	72	73	69	85	83	78	80	88	82	67	51	69	69	59	59	78	..	*68.2
	Minimum	..	54	33	50	28	23	34	37	42	30	30	42	51	27	32	54	52	43	58	66	57	46	61	49	39	50	54	36	35	43	..	*42.6
Ashland	Maximum	70	70	64	65	65	41	48	53	52	51	63	69	58	53	71	68	62	70	61	63	76	88	86	62	56	60	67	55	58	76	..	63.4
	Minimum	53	53	35	47	30	29	33	38	33	30	29	40	30	33	39	56	48	50	49	54	57	48	55	49	39	47	55	43	40	50	..	43.1
Beattyville	Maximum	69	70	68	77	65	52	51	58	60	54	66	70	55	59	73	75	70	82	75	78	78	80	80	68	53	72	70	59	59	75		67.4
	Minimum	54	53	29	47	30	21	32	36	29	45	25	41	31	28	38	56	43	43	52	72	52	43	51	48	37	48	51	37	32	44	..	40.8
Berea	Maximum	66	..	58	74	56	51	51	55	59	54	75	76	55	56	68	73	64	80	79	75	83	84	82	55	53	72	67	58	59	73	..	*66.0
	Minimum	52	..	33	46	29	25	43	30	36	28	42	49	29	24	36	55	43	43	53	55	56	55	50	42	40	49	47	42	35	53	..	*42.1
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	65	64	61	73	61	42	49	53	51	47	65	69	54	53	68	62	59	70	62	62	74	84	77	58	58	62	61	53	63	75	..	62.0
	Minimum	54	59	31	45	31	26	31	34	32	28	28	43	28	29	38	58	46	50	51	54	56	49	52	47	41	47	47	40	38	51	..	42.2
Middlesboro	Maximum	65	69	65	74	69	55	55	61	62	60	71	67	57	55	72	72	75	87	81	86	81	85	81	70	57	70	71	60	67	80	..	69.3
	Minimum	[illegible]	54	30	50	30	25	33	36	43	30	29	44	32	24	30	53	52	42	63	65	61	45	58	48	40	49	[illegible]	35	83	45	.	42.7
Mount Sterling	Maximum	65	63	65	69	56	47	49	53	51	49	67	68	50	53	70	71	64	74	66	70	73	84	73	57	55	65	66	51	61	74	..	62.4
	Minimum	53	45	34	44	28	25	29	33	35	27	29	51	28	30	34	47	42	45	47	54	54	52	52	45	40	45	45	36	37	46	..	40.3
Richmond	Maximum	64	62	70	69	61	50	49	55	56	54	70	67	50	52	68	72	64	80	73	72	76	85	79	61	53	66	64	56	57	74	..	64.3
	Minimum	50	48	37	46	28	27	30	24	33	29	31	49	31	29	40	55	43	46	53	56	55	59	53	47	43	48	48	37	31	49	..	42.8
Williamsburg	Maximum	66	67	68	76	75	56	56	60	59	58	74	73	58	58	74	73	70	89	88	79	81	88	85	71	56	74	71	60	63	81	..	70.2
	Minimum	52	55	31	48	30	27	32	39	42	31	29	45	32	25	31	54	49	42	59	66	59	48	59	49	42	50	54	34	36	49	..	43.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
NO PRECIPITATION
NO PRECIPITATION
0.5
1
2
4
6
12

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

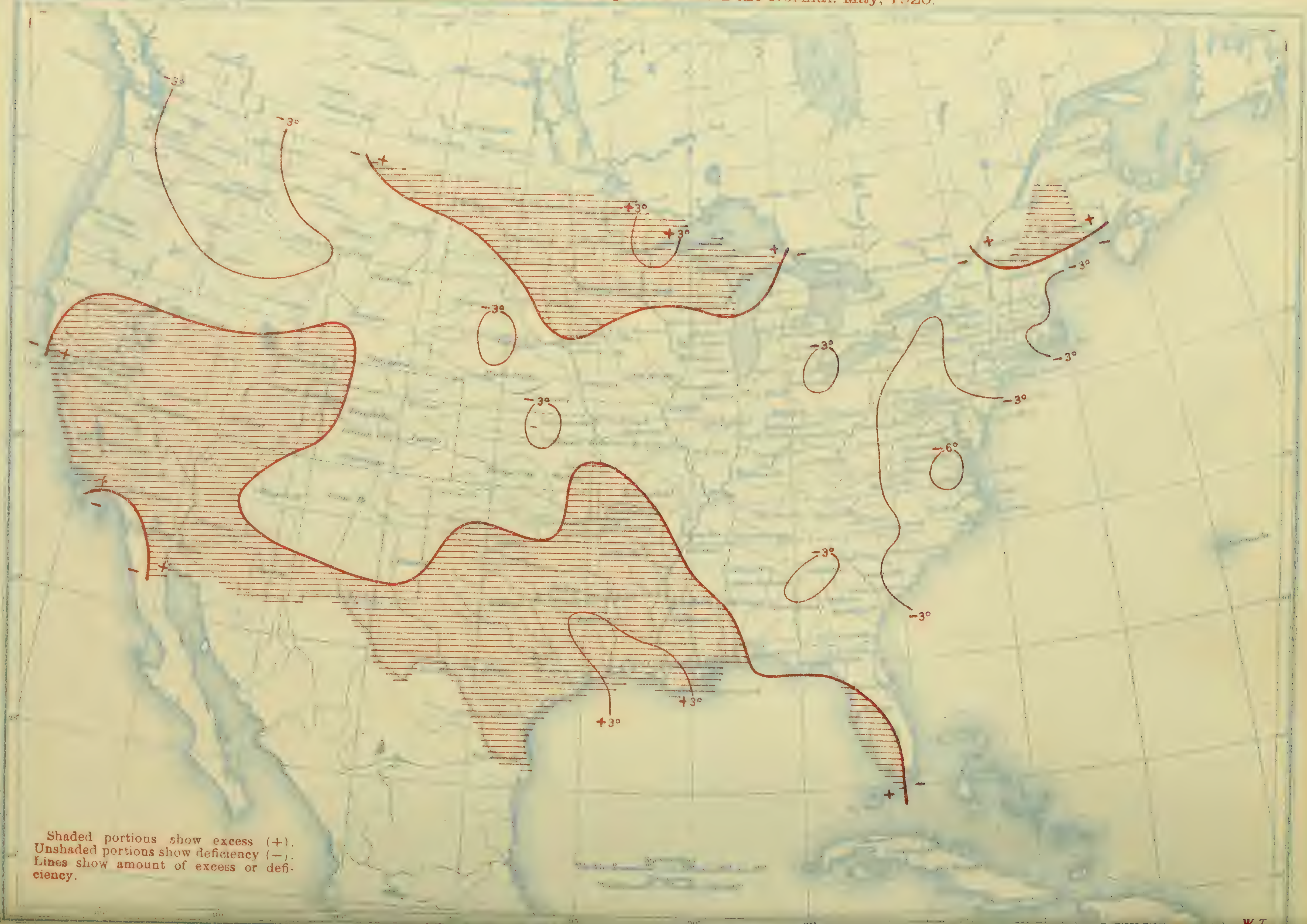
KENTUCKY SECTION

MAY, 1920.

BY
FERDINAND J. WALZ
PROFESSOR AND SECTION DIRECTOR

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JULY 28 1920

Departure of the Mean Temperature from the Normal. May, 1920.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

F. J. WALZ, Professor and Section Director.

Vol. XXV. Louisville, Ky., May, 1920. No. 5

GENERAL SUMMARY.

Low temperature, persistent cloudiness, and frequent showers characterized the weather during the first three weeks. Conditions were decidedly unfavorable for plowing and planting, while germination and growth were retarded. Although precipitation averaged but little above normal, the soil was too wet for preparation or planting most of the time, due largely to the frequency of rainfall and prevailing cloudiness. Corn planting was delayed two weeks or more, or was done when the soil was too wet to be properly worked. At the end of the third week the situation on the farm, due to continued unfavorable weather of April and May, was so serious as to threaten radical curtailment of the corn crop. Only about half of this crop had been planted, while the soil for the remainder and for a large part of the tobacco crop was yet to be prepared.

During the last decade generally fair weather and temperatures above normal prevailed, being the first period of such length this spring when conditions were really favorable for outdoor work. Plowing and planting were pushed with all possible speed, but were still far behind when the month closed. Oats, grass, and potatoes grew well during the month. Wheat and rye made fair progress, but on account of thin stand continued unpromising.

PRESSURE.

High pressure areas were crested to the northward or eastward of this section during most of the month, with low pressure areas practically stationary in the west or southwest much of the time. This pressure distribution caused showers over this State in the period 1st-7th; 16-17th, and 30th-31st. A disturbance that moved slowly eastward from the plains states across the central valleys caused the showers of the 11-13th.

The mean sea-level pressure, based on the reports of two stations, was 30.06 inches. The extremes were the same at both stations, 30.42 inches on the 15th and 29.74 inches on the 12th.

TEMPERATURE.

The average temperature for the month, 40 stations reporting, was 64.2°, which is 1.4° below normal. Minimum temperatures during the first half of the month frequently registered as low as 40° to 45°, and from 32° to 44° at most stations on the 1st and 15th. Light frost was reported from a few stations on the 15th, but without damage of consequence. It was only during the last decade that maximum temperatures of 80° or higher were registered generally over the State. The extremes were 94° on the 23d at Earlington and Bowling Green, and 32° on the 15th at Beattyville.

PRECIPITATION.

Precipitation for the State, determined from the reports of 57 stations, averaged 4.08 inches, which is 0.13 inch above normal. Showers occurred almost daily until the 21st, followed by a week of fair weather, and showers again on the 30th-31st. Rain occurred generally over the State on the 2d; 7-8th; 12-13th; 17th-21st, and 31st. Over the south-central counties and westward to the Ohio and Mississippi rivers, also over a few of the extreme northern counties; the total monthly rainfall ranged from 4 to 6 inches. In the north-central and mountain districts, amounts ranged from 2 to 4 inches. Amounts at the various stations ranged between 2.03 inches at Middlesboro and 7.24 inches at Princeton. Thunderstorms occurred on the 2d, 11-12th, 30th-31st; but were mild in character and accompanied by hail in only a few instances in the west-central counties.

WIND.

The total wind movement at Louisville was 7,958 miles, and at Lexington 9,014 miles, with average hourly velocities of 10.7 and 12.1 miles, respectively. The maximum velocity for five minutes was at the rate of 44 miles per hour on the 30th at Louisville and 40 miles per hour on the 12th at Lexington, from the southwest at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 73 per cent, at 12 noon 55 per cent, and at 7 p. m. 60 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 63 and at Lexington 53.

MISCELLANEOUS

May 30.—Some damage was caused by wind and hail in Grayson aud Breckenridge counties.

Rivers.—The river was still above flood stage at Cairo on the 1st; declining to flood stage by the 8th, but continuing moderately high in this district until near the end of the month. Moderate stages prevailed in other districts.

COMPARATIVE DATA FOR MAY.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain.
1889	63.6	− 2.0	94	28	4.03	+0.08	..
1890	63.9	− 1.7	93	32	4.22	+0.27	..
1891	62.6	− 3.0	90	29	1.78	−2.17	..
1892	64.6	− 1.0	90	36	5.49	+1.54	..
1893	63.2	− 2.4	96	37	5.59	+1.64	..
1894	64.5	− 1.1	99	32	3.54	−0.41	..
1895	63.9	− 1.7	99	29	3.16	−0.79	8
1896	72.2	+ 6.6	106	42	5.34	+1.39	11
1897	61.4	− 4.2	92	32	3.27	−0.68	10
1898	67.6	+ 2.0	93	31	4.52	+0.57	10
1899	68.8	+ 3.2	94	42	4.79	+0.84	11
1900	66.3	+ 0.7	96	29	3.49	−0.46	10
1901	63.7	− 1.9	97	34	2.65	−1.30	10
1902	70.0	+ 4.4	98	35	3.55	−0.40	9
1903	68.0	+ 2.4	98	29	3.09	−0.86	8
1904	65.0	− 0.6	98	33	3.05	−0.90	10
1905	68.0	+ 2.4	95	38	5.23	+1.28	11
1906	69.5	+ 3.9	95	31	2.54	−1.41	9
1907	61.3	− 4.3	93	30	5.07	+1.12	12
1908	66.7	+ 1.1	96	28	4.34	+0.39	12
1909	63.9	− 1.7	93	27	4.64	+0.69	12
1910	61.1	− 4.5	89	30	4.81	+0.86	12
1911	69.4	+ 3.8	105	29	2.46	−1.49	5
1912	66.7	+ 1.1	97	37	4.53	+0.58	10
1913	66.1	+ 0.5	99	29	2.92	−1.03	8
1914	66.5	+ 0.9	103	32	2.16	−1.79	5
1915	65.2	− 0.4	95	35	6.62	+2.67	15
1916	67.2	+ 1.6	98	33	4.02	+0.07	9
1917	58.9	− 6.7	92	30	3.43	−0.52	10
1918	69.4	+ 3.8	97	28	4.29	+0.34	8
1919	63.9	− 1.7	95	35	6.05	+2.10	14
1920	64.2	− 1.4	94	32	4.08	+0.13	11

Climatological data for May, 1920.

Stations.	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	66.6	+ 0.7	93	23	39	15	35	6.10	+2.32	1.17	0	11	17	6	8	ne.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	66.8	+ 0.3	91	23	41	14	30	5.25	+1.01	1.60	0	13	4	15	12	ne.	E. W. Horr.
Calhoun	McLean	437	16	65.0	− 2.4	90	23	42	1‡	31	6.10	+2.49	2.10	0	12	12	7	12	ne.	W. A. Taylor.
Earlington	Hopkins	420	29	66.2	− 1.0	94	23	38	15	36	5.58	+0.87	1.22	0	13	14	3	14	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	a65.3	......	89a	23	39a	15	35a	4.70	......	1.50	0	14	13	14	4	w.	C. R. Lovell.
Henderson	Henderson	327	12	....	....	....	....	....	....	....	6.56	+2.70	1.30	0	13	....	....	....	....	W. W. Shelby.
Hopkinsville	Christian	524	23	67.3	− 0.3	92	23	41	15	39	4.17	−0.06	1.35	0	11	3	1	27	s.	W. E. Graves.
Marion	Crittenden	571	21	65.6	− 1.5	88	23	40	14	29	6.35	+2.06	1.31	0	10	11	9	11	sw.	B. C. Paris.
Mayfield	Graves	364	10	66.0	− 0.2	89	22†	42	14†	32	4.90	+0.55	2.35	0	11	2	14	15	s.	J. N. Davis.
Owensboro	Daviess	479	23	65.4	− 0.9	89	27	43	14†	36	3.83	−0.01	0.60	0	17	6	8	17	sw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	64.7	......	91	24	40	14	32	5.00	......	1.62	0	19	18	3	10	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	....	....	....	....	....	....	....	5.23	+1.42	1.52	0	12	....	....	....	....	Frank L. Brown.
Princeton	Caldwell	529	10	66.1	− 1.4	90	23	41	15	35	7.24	+2.01	1.62	0	15	5	18	8	n.	Dr. W. L. Cash.
Russellville	Logan	590	6	65.3	......	91	23	38	15	37	3.45	−1.07	0.90	0	6	17	0	14	s.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Taylor Davis.
Anchorage	Jefferson	700	19	62.2	− 1.9	90	23	36	1	37	3.31	−0.53	0.78	0	11	19	4	8	sw.	C. E. Barret.
Bardstown	Nelson	637	23	64.2	− 2.8	90	23	37	15	35	3.92	+0.39	0.96	0	9	23	1	7	s.	Chas. M. Talbott.
Bowling Green	Warren	500	29	66.6	− 1.0	94	23	38	14†	35	6.74	+2.49	1.40	0	13	12	6	13	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	....	....	....	....	....	....	....	5.01	......	0.80	0	14	....	....	....	....	James H. Young.
Burnside	Pulaski	773	27	....	....	....	....	....	....	....	4.36	+0.29	1.21	0	12	....	....	....	....	F. E. Bradshaw.
Camp Knox	Hardin	....	0	63.8	......	90	23	39	15	31	2.92	......	0.70	0	11	2	11	18	ne.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	....	....	....	....	....	....	....	3.67	−0.37	1.33	0	12	....	....	....	....	Charlie Oliver.
Cloverport	Breckenridge	375	6	....	....	....	....	....	....	....	5.42	....	1.04	0	13	....	....	....	....	W. A. Cockerill.
Eubank	Pulaski	1177	25	62.2	− 2.0	86	23	33	15	37	5.04	+1.09	1.88	0	10	7	11	13	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	64.0	− 0.9	88	30	38	15	34	2.78	−1.03	0.65	0	10	15	3	13	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	65.8	− 1.2	89	23	37	15	31	3.76	−0.29	1.24	0	10	14	10	7	s.	Prof. V. P. Atkinson.
Greensburg	Green	581	27	63.0	− 1.9	87	30	34	15	36	4.27	−0.02	1.42	0	12	5	9	17	n.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	....	....	....	....	....	....	....	3.62	−0.20	0.74	0	10	....	....	....	....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	64.6	− 1.7	89	23	41	15	30	3.40	−0.01	1.10	0	7	14	5	12	sw.	W. J. Piggott.
Junction City	Boyle	985	26	63.0	− 1.5	87	23	33	15	37	5.36	+1.61	1.55	0	14	17	5	9	e.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	64.7	− 0.8	89	23	41	1†	31	3.70	+0.30	1.52	0	9	13	9	9	ne.	John E. Stone.
Lexington	Fayette	989	32	62.4	− 1.9	87	30	38	14	31	2.51	−1.01	1.13	0	8	10	10	11	ne.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	64.7	− 2.0	89	23	42	15	30	2.53	−1.11	0.86	0	11	12	8	11	n.	U. S. Weather Bureau.
Do. (Cherokee Park).	Do.	534	10	63.0	− 2.7	86	23	39	15	30	3.04	−0.84	0.91	0	10	15	7	9	se.	Wm. I. Hunt.
St. John	Hardin	777	23	63.2	− 1.5	89	23	37	15	32	4.52	+0.54	1.20	0	12	16	0	12	....	Sisters of Loretto.
Scott ¶	Kenton	900	22	61.2	− 2.6	86	23	36	14	33	5.55	+1.49	2.73	0	9	11	10	10	n.	E. B. Wilson.
Shelbyville	Shelby	825	31	61.0	− 4.0	89	30	35	14†	37	2.15	−1.87	0.45	0	11	11	10	10	n.	F. A. Miller.
Taylorsville	Spencer	489	17	62.2	− 2.3	89	23	35	15	36	2.31	−1.16	0.46	0	13	14	6	11	s.	E. D. Bourne.
Williamstown	Grant	943	17	63.4	+ 0.3	88	27	37	1	34	3.66	+0.11	1.20	0	10	10	13	8	....	Miss Rose Carter.
Woodbury	Butler	533	2	....	....	....	....	....	....	....	4.69	......	1.19	0	13	....	....	....	....	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	a64.2	......	87a	31	35a	15	40a	2.60	......	0.93	0	7	17	7	7	sw.	S. A. Driver.
Ashland	Boyd	534	13	62.6	....	87	23	35	15	35	2.25	......	1.02	0	5	21	3	7	se.	Forester Farley.
Beattyville	Lee	650	16	63.4	− 0.8	92	23	32	15	46	2.60	−1.55	0.61	0	13	12	7	12	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	64.2	− 3.6	90	23	34	15	31	4.42	+0.36	1.91	0	10	17	3	11	n.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	....	....	....	....	....	....	....	2.65	......	0.65	0	9	....	....	....	....	P. H. Kehoe.
Falmouth	Pendleton	600	31	....	....	....	....	....	....	....	4.96	+1.26	1.49	0	9	14	7	10	se.	J. V. Oldham.
Farmers	Rowan	668	12	....	....	....	....	....	....	....	2.87	−1.19	0.60	0	8	16	9	6	w.	Miss Catherine Evans.
Jackson	Breathitt	776	8	....	....	....	....	....	....	....	2.56	−1.16	0.89	0	4	....	....	....	....	Jas. L. McCoy.
London	Laurel	1190	5	....	....	....	....	....	....	....	5.03	......	1.48	0	10	....	....	....	....	C. R. Lee.
Louisa	Lawrence	584	16	....	....	....	....	....	....	....	3.07	−1.15	0.83	0	9	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	22	63.2	− 1.9	87	23†	38	15	35	5.13	+1.08	1.70	0	7	10	4	17	e.	Harry M. Robinson.
Middlesboro	Bell	1128	21	63.9	− 0.8	88	23	33	15	42	2.03	−2.18	0.44	0	3	19	10	2	....	B. H. Perkins.
Mount Sterling	Montgomery	930	30	62.0	− 2.1	89	30	33	15	35	2.39	−1.90	0.45	0	11	17	6	8	w.	W. R. McKee.
Oliver	Greenup	....	0	....	....	....	....	....	....	....	2.54	......	0.98	0	10	....	....	....	....	Percy Humphrey.
Pikeville	Pike	634	14	....	....	....	....	....	....	....	3.90	+0.75	1.42	0	9	....	....	....	....	I. M. Williams.
Richmond	Madison	926	25	64.8	− 0.7	88†	28†	38	15	38	3.64	+0.06	0.82	0	10	21	1	9	....	J. W. Crooke.
Vanceburg	Lewis	525	3	....	....	....	....	....	....	....	3.65	......	1.30	0	8	....	....	....	....	Samuel Johnson.
Williamsburg	Whitley	939	22	65.0	− 1.3	92	23	34	15	44	3.50	+0.58	1.30	0	10	11	15	5	w.	D. B. Bradley.
State averages and extremes	....	....	....	64.2	......	94	23	32	15	46	4.08	......	2.73	0	11	13	7	11	....	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow

¶ Post-office address, Covington, Ky.

Daily Precipitation for May, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total
Western Division.																																	
Beaver Dam	G		.60			[illegible]		1.17					1.05	.12				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]										[illegible]	[illegible]
Blandville	M		.17	.31	T.	[illegible]	[illegible]	[illegible]				.07	.39	[illegible]			.54	1.60	.02														[illegible]
Calhoun	G		.42			[illegible]		2.10					.65	.06	T.		[illegible]	[illegible]	.23	.71	.64	.10			.11								6.19
Farmington ‖	G	.03	[illegible]	[illegible]		T		.75	.58				.56	.26				.24	.50	.03	.10	.97											5.78
Greenville	G		.39			.05		1.50				.25	.05	.06				.60	.22	.01	[illegible]	[illegible]			[illegible]						[illegible]		4.70
Henderson	O		.70			[illegible]			.45				1.30	.40				.55	[illegible]	.01	.40	.90			.07	.02							[illegible]
Hopkinsville	C	T.	.16	.29				T.	.06				.29	.21			T	.28	[illegible]	.29		.13				1.35							[illegible]
Marion	O		.68					1.02				.56	[illegible]				T	.61	[illegible]		1.31				[illegible]						.28		[illegible]
Mayfield ‖	M		.22	.04		[illegible]	.15	.05	[illegible]					.32				1.05	.05			.24											[illegible]
Owensboro ‖	O	.01	.30	.10		.01		.24	[illegible]				.11	.53	.01			.25	.57	.10	[illegible]	[illegible]				.07							[illegible]
Paducah (Lone Oak)	O	.09	.22	.05	.02	.34	.02	.30	.01			.04	.25	.36	.01		[illegible]	1.62	.02	T.	.02	.05				T.					[illegible]	1.03	5.60
Paducah ‖	O	.14	T	.34		.14		.15	T				.10	[illegible]	T			1.00	.46		.08	.60				.10							[illegible]
Princeton	G		.34	T	T	.02		.48				.80	.10	.04			[illegible]	[illegible]	.21		[illegible]	[illegible]			[illegible]	[illegible]					.68	.31	7.24
Russellville ‖	G		.28					T	T				.90	.90					[illegible]							.25						[illegible]	[illegible]
Central Division.																																	
Alpha	C																																
Anchorage	O		.31			T		.16				.78	.73	T				.19	.09	.03	.13				.23						.25	[illegible]	3.31
Bardstown ‖	S		[illegible]					.96	.90				.50	.30					.60	.10	.05	.16										[illegible]	[illegible]
Bowling Green ‖	G	.66		.68		.15		1.04	.35				[illegible]	.22				.06	.65	1.00		[illegible]				1.40						.45	6.74
Brownsville ‖	G	.28	.04	.36		.02		.17	.73				.80	.45					.61	.14	.02	.54				.14						.71	5.01
Burnside ‖	C	1.26	T.	.26				.22	.33					.22					.62	.06		[illegible]	.22			.48	.08					.50	4.56
Camp Knox¶	O		.41					.70	.01			.07	.01	.50	T			.17	.21	T	.20	.01			T	T.						.63	2.92
Carrollton ‖ (Lock No. 1)	O	.02		.14				.14	.02				.98	1.33					.18	.02	.35	.07			[illegible]							[illegible]	3.67
Cloverport ‖	O	T	.62	.08				.40	.25				.12	.91	T.			.74	.51	.49	.09	.11				.06						1.04	5.12
Eubank ‖	C	.48		.22					1.88					.61					.48	.13		.10	.11				.30					.73	5.04
Frankfort	K		.11	.08				.05	.20				.53	.31					.42	.32	.11	T		T								.65	2.78
Franklin	G		.54									.11	.06	.04				.15	1.24			.32			.05	.75					.50		3.76
Greensburg ‖	G	.46	.02	.33				.07	1.42				.37	.38					.44	.21		.33	.10			T						.14	4.27
High Bridge ‖	K		.13	.10				.54	.45				.32	.45					.54	.26		.09										.74	3.62
Irvington	O		.52					.58				.65	.45		T.			.49	T.	T.	.21	T			T						1.10	T.	[illegible]
Junction City	K		.36			.04		1.55	.03			.35	.62	.36			.02	.07	.46	T.	.16	.44									.40	.50	5.36
Leitchfield	G		.40					1.52				.14	.54			*	.63			.18												.29	3.70
Lexington ***	K		.15					[illegible]				[illegible]	.08					.15	1.11	T.	T	T			T						[illegible]	.17	2.51
LOUISVILLE***	O		[illegible]		.03			.19				.26	.47				T	.37	.03	.01	.07				T						[illegible]	[illegible]	[illegible]
Do. (Cherokee Park)	O		.31			.03		.35				.50	.29	.11					.40	.05	.09				T							.91	3.04
St. John ‖	S	.05	.40	T.				.98	.50				.03	.20	T			T.	.48	.03	.01	.51				.13						1.20	4.52
Scott	L				T.							.15	2.73	.08				.20	.25	[illegible]	.15	T		[illegible]	1.94							[illegible]	[illegible]
Shelbyville	S			.26				.10	.19				.16	.45	.01				.30	.11	.12	.01										.44	2.15
Taylorsville	S		.36			.07		.46				.15	.10	.02				.35	.36	.02	.20				[illegible]						.04	[illegible]	2.31
Williamstown ‖	L		T.						.11			.09	.10	1.20					[illegible]	.41	1.00	.15			T.	[illegible]						.24	3.66
Woodbury ‖	G	.28		.12		.07		.54	.37				.12	.19				.29	.51	.01	T.	.68				.12						1.19	4.69
Eastern Division.																																	
Ages	K		.20					.25	T				T.						.65	.02					.93	.25	.30						2.60
Ashland	O								.04				1.02	.51						.36	.32	T.											2.25
Beattyville ‖	K	.04	.13	.06				.52	.61				T.	.52					.12	.02	.02	.04	.18			.02						.32	2.60
Berea	K		.24				.10	1.91				[illegible]		.81				.04	.37		.06	.26									T	[illegible]	4.12
Cynthiana ‖	L			.10		T.	T.	T.	.15				.55	.65					[illegible]	.35	[illegible]	T	T.		.15							[illegible]	2.65
Falmouth ‖	L							.05	.11				1.60	1.49					.25	.14	.91	.15										.26	4.96
Farmers ‖	L			.10				T	.49				.47	.20					.22					.19		.60					.60		2.87
Jackson ‖	K	T.	T.	T.				T.	.89					.65					T	.40	T.	T.	T		T	.62							2.56
London ‖	C	1.48		.40			.40		.95					.50				.10		.15						.30	.20					.55	5.03
Louisa ‖	B							T.	.47				.37	.50	.03				.05	.31	.11					.83						.40	3.07
Maysville ‖	O												1.70	1.70					.60	.55	T.	.07			.14	T						.37	5.13
Middlesboro	C	.26	.28						.44					.11					.38			.10			.37	.09							2.03
Mount Sterling	L			.16				.13	.15				.35	.23	T.				.45	.25		.15			.05	.32						.15	2.39
Oliver ‖	O	.39							.03				.98	.86					.04	.12	.01	.04				T	.02					.05	2.54
Pikeville ‖	B	.08	.22					.08	1.42					.44						.52		.12				.94						.08	3.90
Richmond	K		.11	.08				.40	.82				.22	.53					.51	.31		.03										.63	3.64
Vanceburg ‖	O	.06						.06					.98	1.30					.29	.12		.04										.80	3.65
Williamsburg ‖	C	.59		.20				.20	.26					.06					.10	.34	T.	T				1.30	.05					.40	3.50

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

¶ Precipitation for 24 hours ending at 3 p. m.

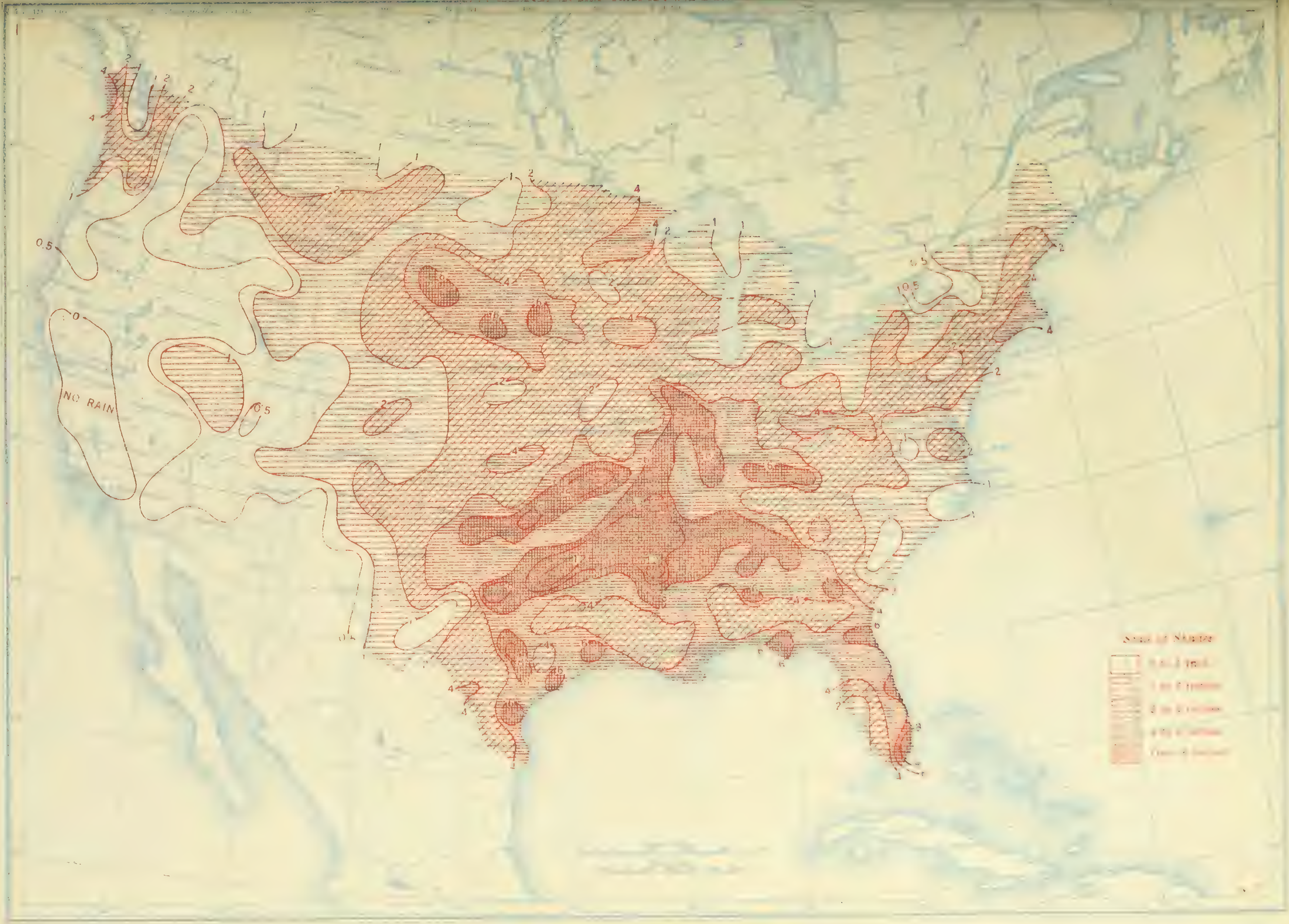
Daily temperatures for May, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	72	68	71	73	75	78	74	75	80	82	76	80	72	64	70	73	70	72	81	80	84	88	93	85	84	87	88	87	83	89	78	78.5
	Minimum	41	48	50	43	49	45	58	46	45	49	59	63	52	44	39	50	53	57	57	61	64	55	61	64	60	62	53	58	59	57	62	53.7
Blandville	Maximum	69	70	71	77	69	75	62	74	79	78	80	77	62	61	69	67	67	77	77	82	82	86	91	86	80	83	85	87	81	81	79	76.3
	Minimum	44	53	54	53	51	52	57	50	49	53	63	62	52	41	43	51	57	60	61	65	61	66	69	68	65	62	62	63	64	65	63	57.4
Calhoun	Maximum	70	65	71	71	73	75	70	72	78	79	75	78	64	60	67	69	69	71	77	80	82	84	90	85	80	80	85	86	81	86	76	75.8
	Minimum	42	50	50	47	50	47	54	49	47	50	57	61	50	43	42	51	53	58	60	59	63	56	62	67	63	57	56	58	61	57	63	54.3
Earlington	Maximum	74	69	73	75	74	80	68	76	80	81	78	78	63	64	71	74	65	73	78	81	84	88	94	86	85	87	89	85	83	86	80	78.1
	Minimum	44	50	53	48	52	45	55	46	44	48	58	63	51	43	38	51	53	58	61	61	62	55	64	67	63	59	54	57	60	55	64	54.3
Greenville	Maximum	78	68	68	71	70	77	68	73	78	79	75	79	75	60	67	74	73	72	76	79	82	85	89	83	79	..	85	84	79	85	77	[a]76.3
	Minimum	43	48	51	47	49	47	57	47	45	50	61	62	50	44	39	59	54	58	59	60	62	57	61	67	61	..	54	56	61	56	63	[a]54.3
Hopkinsville	Maximum	74	67	75	76	73	78	67	77	83	84	81	79	72	64	70	73	69	71	79	83	87	89	92	88	83	88	87	89	84	85	75	78.8
	Minimum	45	52	53	50	50	49	60	50	44	48	59	64	53	45	41	53	54	58	58	62	63	62	63	67	63	63	55	59	63	60	64	55.8
Marion	Maximum	70	67	72	74	73	76	65	73	78	78	80	76	61	61	68	69	65	72	76	82	83	84	88	82	78	86	85	83	81	83	76	75.6
	Minimum	42	55	52	49	52	49	54	47	50	55	60	60	50	40	44	51	53	57	61	61	61	62	59	68	64	62	62	63	62	59	62	55.7
Mayfield §§	Maximum	70	71	72	78	68	74	65	73	78	78	80	77	59	60	67	69	65	76	74	80	83	89	89	88	80	85	84	87	84	86	78	76.4
	Minimum	46	50	49	53	51	51	59	50	46	52	56	62	53	42	42	46	55	56	60	62	62	64	67	67	65	60	59	58	60	62	63	55.7
Owensboro	Maximum	71	64	72	70	73	74	66	73	76	78	73	78	65	63	68	70	65	71	76	77	81	81	87	81	82	84	89	81	81	86	76	75.2
	Minimum	44	50	49	48	52	50	55	50	48	53	59	63	50	43	43	52	53	59	59	58	62	57	64	68	63	63	53	61	73	59	64	55.6
Paducah (Lone Oak)	Maximum	62	63	65	68	66	65	68	68	72	72	73	73	70	55	64	65	63	68	69	76	77	88	90	91	82	88	82	90	88	86	87	74.0
	Minimum	46	52	53	48	42	50	50	48	51	55	63	65	50	40	44	48	55	59	62	66	60	62	66	69	62	62	60	60	59	59	55	55.4
Princeton	Maximum	72	69	74	66	72	79	72	72	79	78	79	79	70	62	70	71	65	73	76	79	84	85	90	80	77	86	86	82	81	86	78	76 8
	Minimum	45	51	53	50	52	49	56	47	44	48	57	65	51	43	41	52	53	59	59	62	62	58	67	67	63	62	57	59	62	59	64	55.4
Russellville§§	Maximum	70	66	71	71	66	77	73	75	77	80	81	78	59	61	67	76	63	71	77	79	82	85	91	84	81	83	85	85	83	88	76	76.2
	Minimum	44	49	52	46	50	47	54	44	40	48	66	63	55	45	38	45	54	54	59	61	63	61	62	66	62	60	53	58	61	61	65	54.4
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	68	61	65	65	68	73	60	74	77	80	79	76	65	61	65	74	68	67	77	72	80	80	90	76	82	81	82	86	81	88	88	74.5
	Minimum	36	45	42	42	47	41	49	43	40	50	56	59	47	37	38	43	53	54	56	59	55	49	55	65	57	58	51	52	56	54	62	50.0
Bardstown	Maximum	71	61	65	68	70	78	73	73	78	81	82	80	63	59	65	77	68	69	78	75	79	82	90	82	81	82	85	88	80	88	79	75.8
	Minimum	41	47	45	43	51	44	54	45	44	51	55	61	53	41	37	45	56	56	56	61	61	52	55	66	64	62	53	58	58	54	63	52.6
Bowling Green	Maximum	71	68	74	75	75	79	66	76	80	81	82	81	63	65	73	83	74	66	79	79	86	88	94	86	85	88	90	88	85	91	79	79.0
	Minimum	43	48	52	45	50	48	58	52	46	50	61	57	45	38	38	47	60	57	57	61	61	56	59	67	63	60	55	59	59	60	64	54.1
Camp Knox	Maximum	70	63	64	68	68	75	61	72	77	81	79	77	61	59	66	75	66	66	77	75	81	84	90	79	79	81	86	86	77	86	75	74.3
	Minimum	41	48	45	45	52	46	52	46	46	50	57	61	48	43	39	46	54	55	57	61	61	54	61	68	61	63	55	61	57	55	63	53.3
Eubank	Maximum	65	61	64	68	70	73	64	69	74	77	80	77	68	53	66	78	70	65	70	72	79	81	86	75	78	78	82	83	79	86	78	73.2
	Minimum	41	46	45	41	50	50	53	50	39	45	54	60	50	38	33	44	55	55	54	59	57	50	49	63	63	58	52	56	58	55	60	51.1
Frankfort	Maximum	72	64	63	66	70	74	71	72	76	79	81	77	65	61	64	74	73	67	76	74	79	79	86	85	78	80	84	86	79	88	85	75.4
	Minimum	41	47	44	45	50	47	52	46	44	52	54	60	48	41	38	45	56	56	56	61	60	51	56	67	64	63	54	60	59	54	63	52.7
Franklin	Maximum	71	66	69	70	71	74	69	73	78	71	76	79	73	60	67	77	72	68	76	72	81	84	89	88	82	83	84	88	83	87	85	76.3
	Minimum	45	49	52	46	50	48	59	52	47	55	61	65	54	45	37	47	54	58	59	62	62	58	60	68	63	61	54	59	63	60	58	55.2
Greensburg	Maximum	68	64	66	70	71	76	68	72	75	78	81	78	77	58	65	78	74	66	75	75	79	79	86	85	80	81	82	85	82	87	76	75.1
	Minimum	41	47	46	39	49	48	53	50	41	48	51	56	51	40	34	42	55	55	55	59	58	50	52	64	61	58	50	58	57	54	60	51.0
Irvington	Maximum	66	63	64	68	70	75	69	74	75	78	77	77	65	59	65	75	66	69	76	75	79	81	89	80	80	82	83	84	79	87	75	74.5
	Minimum	43	49	46	46	52	47	50	49	47	55	59	60	49	42	41	47	55	58	60	63	63	56	63	67	64	63	61	59	60	57	64	54.7
Junction City	Maximum	73	65	64	69	70	75	70	71	76	78	79	77	75	57	65	76	70	65	76	74	80	80	87	85	80	80	83	85	83	86	77	75.2
	Minimum	37	43	43	39	47	45	55	49	40	48	51	41	49	37	33	39	53	55	54	59	60	48	51	65	64	58	52	76	55	51	58	50.8
Leitchfield	Maximum	68	68	67	70	72	77	68	72	76	77	75	77	62	60	67	76	71	68	76	77	82	83	89	82	81	84	85	86	80	86	74	75.4
	Minimum	41	48	48	45	52	47	56	46	45	52	56	61	50	44	41	46	55	56	58	61	63	55	60	66	63	63	56	60	59	57	63	54.0
Lexington	Maximum	63	58	60	64	67	71	62	69	72	75	77	74	59	53	61	75	62	64	73	70	75	78	85	78	74	77	82	83	76	87	77	71.0
	Minimum	40	48	40	43	49	48	50	46	54	58	60	59	45	38	42	44	55	55	57	64	62	61	64	66	62	60	63	62	55	60	62	53.9
Louisville	Maximum	66	62	64	67	69	74	62	72	77	79	77	74	63	60	66	74	67	67	73	71	79	81	89	76	82	82	85	86	80	88	76	73.8
	Minimum	45	48	47	46	51	48	52	53	50	60	64	60	47	43	42	48	56	58	60	62	62	61	62	67	62	63	59	66	59	58	64	55.6
Do. (Cherokee Park)	Maximum	69	63	64	67	68	72	70	72	75	79	77	75	73	59	64	73	71	67	73	71	76	78	86	79	77	79	82	82	77	85	74	73.4
	Minimum	42	48	43	43	48	44	51	47	45	54	59	61	48	41	39	46	55	55	58	60	59	52	57	69	61	61	55	62	50	54	62	52.5
St. John	Maximum	65	61	64	66	68	77	65	73	77	78	76	77	61	57	64	75	65	67	72	75	80	81	89	82	80	81	85	85	84	86	75	73 9
	Minimum	40	47	45	42	50	45	54	45	49	50	55	60	50	42	37	46	55	54	57	61	62	54	60	64	62	61	53	60	57	56	51	52.4
Scott	Maximum	66	61	60	64	68	71	68	70	78	78	81	66	59	56	63	72	66	62	73	74	78	78	86	76	77	78	85	77	76	84	78	71.9
	Minimum	37	49	38	41	45	42	49	46	45	52	60	52	44	36	37	43	53	53	56	57	58	52	57	61	60	59	54	59	53	53	63	50 5
Shelbyville	Maximum	67	61	63	67	62	73	64	72	73	78	76	70	70	57	65	69	69	65	75	71	74	75	88	80	80	81	87	85	79	89	70	72.7
	Minimum	36	45	39	39	45	41	48	43	41	49	53	58	44	35	35	40	51	52	54	58	55	50	55	66	59	58	52	59	53	52	60	49.2
Taylorsville	Maximum	65	61	61	65	68	72	66	71	76	78	79	76	65	58	64	74	70	66	76	75	79	79	89	80	79	81	85	85	80	87	76	73.7
	Minimum	39	46	44	44	48	42	50	42	41	49	52	59	48	41	35	42	55	55	55	59	56	48	53	66	61	59	51	57	58	52	62	50.6
Williamstown	Maximum	68	62	65	64	69	75	66	72	78	81	82	80	74	69	75	75	68	63	74	73	77	80	87	79	78	80	88	80	84	87	82	75.3
	Minimum	37	48	38	40	45	43	47	46	46	54	61	54	45	47	50	41	52	53	54	57	59	58	59	65	59	58	57	60	53	54	61	51.6
Eastern Division.																																	
Ages	Maximum	70	66	..	75	77	75	72	70	74	80	82	80	74	65	75	78	81	63	75	75	77	79	82	81	80	82	86	79	84	85	87	[a]77.0
	Minimum	49	42	..	40	48	56	55	51	42	44	48	55	55	46	35	39	55	55	54	54	59	55	50	60	60	58	53	53	56	59	59	[a]51.5
Ashland	Maximum	69	63	61	65	70	76	76	74	74	81	84	69	64	57	61	73	71	63	73	74	80	80	87	81	75	77	84	85	80	85	86	74.1
	Minimum	41	42	40	44	49	49	47	49	41	47	52	59	50	40	35	40	54	56	56	60	61	49	54	65	65	56	54	57	56	50	63	51.0
Beattyville	Maximum	70	60	70	70	75	77	60	71	76	83	84	82	74	62	67	82	74	64	78	73	82	83	92	89	82	80	85	89	87	89	89	77.4
	Minimum	39	38	41	36	49	46	52	50	40	44	47	59	52	39	32	36	48	52	49	56	56	47	48	62	55	65	51	65	64	50	60	49.3
Berea	Maximum	69	63	65	68	72	75	73	69	75	80	83	73	65	64	67	78	78	67	77	77	79	83	90	87	81	79	85	87	81	89	82	76.2
	Minimum	39	43	43	44	49	49	56	50	42	54	58	58	49	39	34	46	46	55	57	60	60	49	59	67	65	59	55	57	58	55	62	52.2
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	68	63	64	66	72	75	67	73	76	81	83	66	64	57	65	76	68	67	74	76	78	82	87	78	79	81	86	78	81	87	85	74.3
	Minimum	40	48	41	42	47	44	50	47	44	52	55	60	48	49	38	43	55	54	54	60	60	51	56	65	65	59	55	61	56	52	63	52.1
Middlesboro	Maximum	69	66	73	72	77	76	71	71	75	80	82	80	75	64	71	78	74	63	75	75	77	85	88	87	73	81	84	86	87	86	86	77.0
	Minimum	51	42	46	39	50	54	57	51	39	41	47	54	56	47	33	36	56	55	55	54	57	53	48	59	62	61	51	52	55	58	57	50.8
Mount Sterling	Maximum	63	58	61	65	69	75	60	70	73	79	81	78	63	53	63	75	68	68	78	77	78	82	87	85	77	78	82	84	77	89	84	73.5
	Minimum	37	44	40	40	48	45	50	44	42	54	55	59	48	36	33	41	55	54	52	60	63	47	53	65	64	57	55	57	54	54	62	50.6
Richmond	Maximum	68	66	66	70	74	76	75	72	75	79	81	77	75	61	69	80	74	65	76	72	78	83	87	83	81	83	86	88	82	88	81	76.5
	Minimum	41	47	42	41	48	47	47	48	47	56	61	61	50	39	38	42	56	55	55	63	63	54	57	68	65	60	57	62	57	57	62	53.1
Williamsburg	Maximum	70	69	70	72	77	77	64	72	75	84	85	88	78	63	72	80	77	70	78	78	83	86	92	88	77	82	85	86	85	86	84	78.5
	Minimum	47	43	45	40	49	51	55	53	42	45	51	56	56	46	34	37	54	56	55	56	59	52	48	63	62	62	53	55	57	59	60	51.6

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, May,



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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

JUNE, 1920.

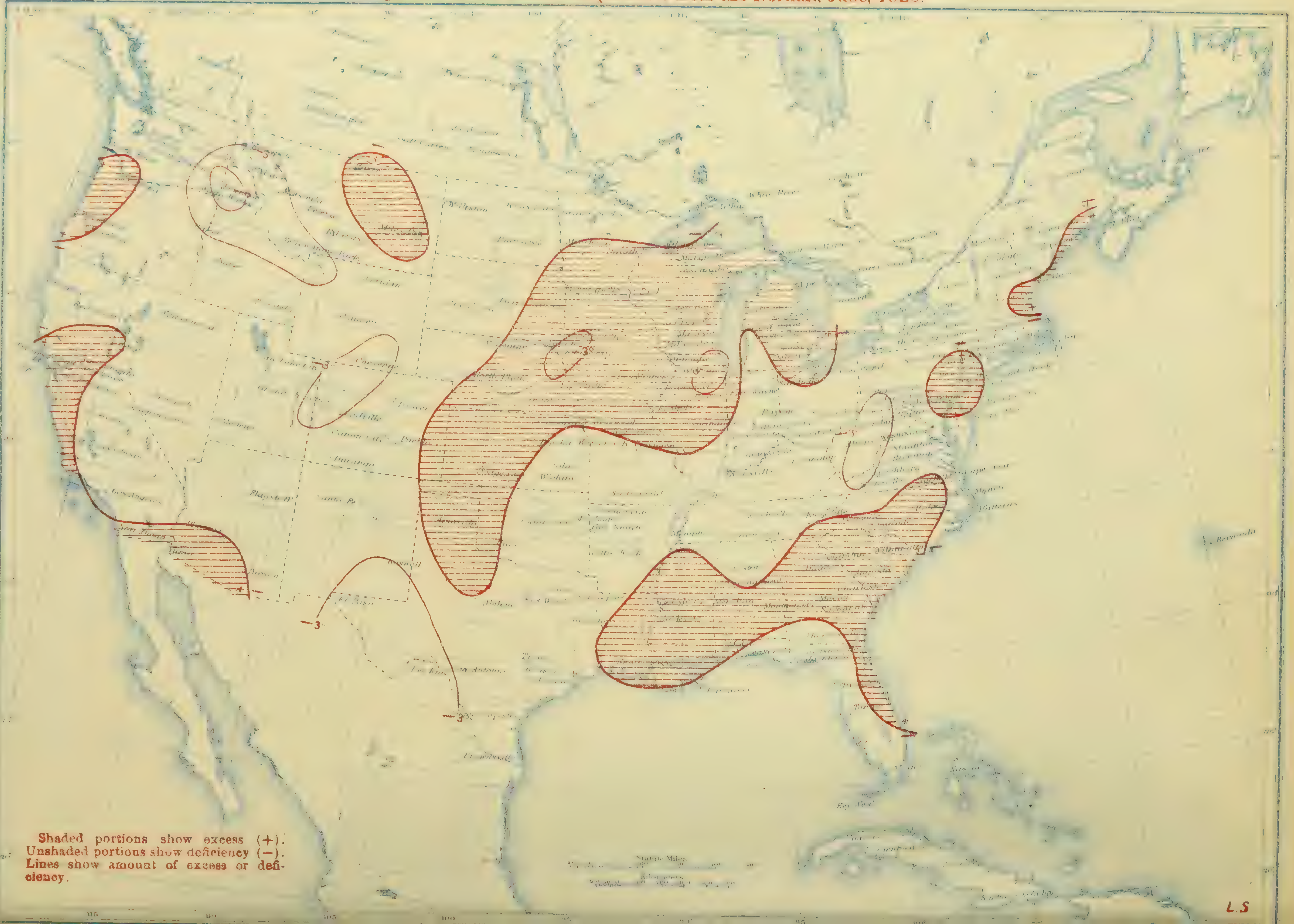
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
AUGUST 20, 1920.

Departure of the Mean Temperature from the Normal, June, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

Vol. XXV. Louisville, Ky., June, 1920. No. 6

GENERAL SUMMARY.

Cool, cloudy weather, with heavy rains in all districts, prevailed during the first four days. These conditions were favorable for transplanting tobacco, which progressed rapidly; but caused further delay in preparation of soil and planting of corn. After this period, except for a few heavy local rains in the eastern counties, only light scattered showers occurred; and farm work was carried forward without serious interruption during the remainder of the month. Much corn was planted during the second week, but this work was discontinued in the third week on account of the lateness of the season. The weather during the last three weeks was especially favorable for cultivation of corn and tobacco; and these crops were generally clean at the end of the month. Weather conditions during the month were favorable for heading and ripening of wheat, the low temperature compensating largely for the lack of moisture. Wheat improved constantly until harvest and produced a better crop than had been expected. Harvest took place under ideal conditions, with the grain dry and threshing in progress by the end of the month. The growth of early potatoes was checked by dry weather. Oats headed well, but with short straw that will render harvest difficult. A rather poor stand of tobacco was obtained in the late setting, for much of that which was transplanted during the first week died and could not be re-set because of the dry weather.

PRESSURE.

The more important low pressure formations, affecting weather conditions over this section in their movement eastward during the month, occurred in the periods 1st-2d, attended by moderate to heavy showers; 4-5th, accompanied by heavy rains; 16th, 19th, 21st-22d, all attended by scattered showers. High pressure areas dominated during the 3d, 6-14th, 18-19th, and 23d-29th.

The mean sea-level pressure based on the reports of two stations, was 30.02 inches. The extremes were 30.32 inches at Louisville on the 26th and at Lexington on the 27th, and 29.58 inches at Louisville on the 16th.

TEMPERATURE.

The average temperature for the month, 40 stations reporting, was 71.9°, which is 1.8° below normal. Cool weather, with minimum temperatures in the 50's, prevailed during the periods 4-8th and 18-26th; registering as low as 44° to 50° at several stations on the 6th, 7th, and 18th. Maximum temperatures of 90° or above occurred generally in the period 10-16th, and 27-29th. The extremes were 100° on the 27th at Greenville, and 44° on the 6th at Anchorage.

PRECIPITATION.

Precipitation for the State, determined from the reports of 56 stations, averaged 3.12 inches, which is 1.06 inches below normal. The only general rains during the month occurred in the period 1st-4th, when most of the month's rainfall was received. There were scattered showers in the central and eastern counties on the 14th and 17th, and over the State from the 19th to 27th. Precipitation was heaviest in the mountain region, averaging from five to six inches; also over small areas in the upper Cumberland Valley and in Christian County. In the central, western and northern counties amounts averaged generally between two and four inches. It was less than two inches in the counties bordering on the Ohio from Oldham to Breckinridge and in the district north of the mouth of the Cumberland. Amounts at the various stations ranged between 0.70 inch at Marion and 6.32 inches at Middlesboro. Thunderstorms occurred on the 1st, 2d, 8th, 13th, 14th, 16th, 17th, 21st and 22d.

WIND.

The total wind movement at Louisville was 7,526 miles, and at Lexington 8,458 miles, with average hourly velocities of 10.5 and 11.7 miles, respectively. The maximum velocity for five minutes at Louisville was at the rate of 40 miles per hour from the south on the 16th and from the west on the 17th, and at Lexington 38 miles from the southwest on the 2d.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 73 per cent, at 12 noon 52 per cent, and at 7 p. m. 56 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 73 and at Lexington 65.

MISCELLANEOUS

June 2.—A barn was destroyed by lightning near Greenville. At St. Charles, Hopkins County, six men sitting in a group were struck by lightning and three probably fatally injured.

June 8.—A father and son, sheltered under a tree near Maysville, were rendered unconscious by lightning.

June 14.—Two men were killed by lightning, one near Wakefield, Spencer County and the other in Shelby County.

June 22.—Lightning struck a barn near Scuffletown, Henderson County, killing 12 mules and injuring 18 others, 10 of which were so badly hurt that they had to be killed.

Rivers.—Except for minor rises, due to rains over portions of the upper basin, which passed down the river from the 5th to the 9th and from the 18th to 26th, moderate stages prevailed in the Ohio during the month.

COMPARATIVE DATA FOR JUNE.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain.
1889	70.6	− 3.1	99	38	5.27	+1.09	
1890	78.4	+ 4.7	101	51	4.96	+0.78	
1891	77.1	+ 3.4	97	51	4.48	+0.30	
1892	75.8	+ 2.1	101	48	4.23	+0.05	
1893	73.3	− 0.4	97	46	4.64	+0.46	
1894	75.6	+ 1.9	102	35	2.69	−1.49	
1895	75.9	+ 2.2	104	47	3.63	−0.55	
1896	73.5	− 0.2	98	46	4.64	+0.46	10
1897	73.4	− 0.3	101	41	3.61	−0.57	9
1898	76.2	+ 2.5	101	45	3.90	−0.28	9
1899	76.1	+ 2.4	100	44	2.80	−1.38	8
1900	73.9	+ 0.2	100	40	6.14*	+1.96	14
1901	75.6	+ 1.9	104	42	3.97	−0.21	9
1902	73.4	− 0.3	101	39	4.75	+0.57	11
1903	68.6	− 5.1	96	37	3.61	−0.57	10
1904	73.2	− 0.5	99	48	3.14	−1.04	11
1905	74.8	+ 1.1	106	45	4.49	+0.31	10
1906	73.9	+ 0.2	99	42	4.53	+0.35	11
1907	70.2	− 3.5	95	41	4.91	+0.73	11
1908	73.4	− 0.3	102	43	4.36	+0.18	7
1909	74.5	+ 0.8	99	43	5.03	+0.85	14
1910	70.0	− 3.7	99	36	5.20	+1.02	10
1911	75.2	+ 1.5	106	45	4.06	−0.12	10
1912	70.2	− 3.5	95	38	3.55	−0.63	10
1913	75.0	+ 1.3	107	38	2.87	−1.31	7
1914	78.3	+ 4.6	108	45	2.30	−1.88	5
1915	71.7	− 2.0	95	42	4.79	+0.61	12
1916	70.1	− 3.6	99	45	4.94	+0.76	11
1917	70.9	− 2.8	100	39	4.30	+0.12	10
1918	73.6	− 0.1	104	37	3.63	−0.55	8
1919	76.7	+ 3.0	103	51	4.00	−0.18	10
1920	71.9	− 1.8	100	44	3.12	−1.06	7

Climatological data for June, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	72.7	− 0.9	95	11†	49	7	37	1.81	−1.62	0.87	0	7	20	6	4	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	73.3	− 1.6	95	14	55	8†	30	3.42	−0.94	1.15	0	5	16	9	5	sw.	E. W. Horr.
Calhoun	McLean	437	16	72.5	− 2.5	95	14	52	6†	37	3.34	−0.29	1.12	0	6	17	4	9	sw.	W. A. Taylor.
Earlington	Hopkins	420	29	73.2	− 2.5	98	13†	48	6†	39	2.30	−1.13	0.92	0	7	18	5	7	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	b72.2	......	100b	27	50b	6†	42b	2.20	......	0.95	0	6	17b	8b	3b	w.	C. R. Lovell.
Henderson	Henderson	327	12	.....	......	......	......	......	......	......	4.98	+0.75	2.30	0	7	....	....	....	......	W. W. Shelby.
Hopkinsville	Christian	524	23	73.6	− 1.6	98	14	51	6	37	5.16	+0.88	2.92	0	8	20	1	9	sw.	W. E. Graves.
Marion	Crittenden	571	21	73.2	− 1.7	93	13†	51	18	31	0.70	−2.95	0.30	0	3	22	2	6	nw.	B. C. Paris.
Mayfield	Graves	364	10	72.1	− 1.5	95	14	52	6	33	2.55	−0.05	1.08	0	6	11	11	8	s.	J. N. Davis.
Owensboro	Daviess	479	23	73.0	− 1.1	93	14†	53	23	32	3.30	−0.27	1.07	0	8	19	2	9	sw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	74.4	......	99	14	53	18	35	2.51	......	1.25	0	7	20	5	5	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	......	......	......	......	......	......	2.18	−2.34	0.98	0	5	....	....	....	......	Frank L. Brown.
Princeton	Caldwell	529	10	72.7	− 3.3	95	14†	50	6†	35	1.01	−3.08	0.50	0	6	16	6	8	s.	Dr. W. L. Cash.
Russellville	Logan	590	6	72.0	......	95	16†	50	7	37	1.89	−1.25	1.40	0	4	21	3	6	n.	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	.....	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	Frank Hicks.
Anchorage	Jefferson	700	19	70.6	− 1.3	94	13†	44	6	38	1.85	−1.78	0.86	0	8	22	2	6	sw.	C. E. Barret.
Bardstown	Nelson	637	23	72.1	− 2.5	95	14†	52	6†	33	2.59	−1.75	0.90	0	8	22	6	2	e.	Chas. M. Talbott.
Bowling Green	Warren	500	29	74.8	− 1.0	98	15	51	8	37	2.40	−1.47	1.00	0	7	20	5	5	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	......	......	......	......	......	......	2.82	.....	1.40	0	8	....	....	....	......	James H. Young.
Burnside	Pulaski	773	27	.....	......	......	......	......	......	......	4.95	+0.57	1.80	0	7	....	....	....	......	F. E. Bradshaw.
Camp Knox	Hardin	......	0	71.2	......	93	9†	50	7†	32	1.72	......	0.70	0	9	4	15	11	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	.....	......	......	......	......	......	.....	3.07	−0.52	0.62	0	11	....	....	....	......	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	......	......	......	......	......	......	1.76	......	0.76	0	8	....	....	....	......	W. A. Cockerill.
Eubank	Pulaski	1177	25	70.1	− 1.0	91	15	46	6	33	3.14	−0.94	1.00	0	6	10	9	11	w.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	72.0	− 1.3	93	11†	50	7	33	3.41	−0.79	1.09	0	7	19	3	8	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	71.6	− 3.3	97	14†	48	26	42	3.10	−0.87	1.48	0	7	18	5	7	s.	B. V. Hunt.
Greensburg	Green	581	27	e69.0	− 4.5	91d	16	47e	7	83e	2.60	−1.76	0.85	0	9	14e	3e	10e	sw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	......	......	......	......	......	......	2.66	−1.33	1.46	0	8	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	22	72.0	− 1.7	91	14†	52	18	28	1.43	−2.56	0.94	0	4	19	3	8	sw.	W. J. Piggott.
Junction City	Boyle	985	26	70.9	− 0.7	92	14	47	7	37	3.27	−0.55	1.55	0	9	19	4	7	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	a71.2	− 1.7	92a	15†	52a	7	33a	1.87	−2.12	1.02	0	6	17	7	6	ne.	John E. Stone.
Lexington	Fayette	989	32	71.3	− 1.9	90	27	52	6	23	2.39	−1.60	0.97	0	11	15	7	8	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	72.8	− 2.2	93	14	52	18	28	1.72	−2.51	......	0	8	18	5	7	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	70.8	− 2.2	89	13	51	18	27	1.45	−2.11	0.78	0	8	16	7	7	w.	Wm. I. Hunt.
St. John	Hardin	777	23	71.8	− 0.5	93	13†	51	5†	34	1.51	−2.49	0.98	0	6	23	2	5	......	Sisters of Loretto.
Scott ¶	Kenton	900	22	70.1	− 1.5	92	28	48	7	31	2.96	−0.72	1.18	0	9	10	13	7	sw.	E. B. Wilson.
Shelbyville	Shelby	825	31	69.4	− 4.1	94	28	47	7	34	4.07	−0.39	1.11	0	9	15	7	8	s.	F. A. Miller.
Taylorsville	Spencer	489	17	70.6	− 1.7	94	16	48	7	36	4.39	−0.14	1.51	0	11	17	4	9	sw.	E. D. Bourne.
Williamstown	Grant	943	17	71.4	+ 0.8	93	11†	48	6†	30	4.71	+0.98	1.95	0	9	12	12	6	......	Miss Rose Carter.
Woodbury	Butler	533	2	.....	......	......	......	......	......	......	2.08	......	1.06	0	6	....	....	....	......	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	a72.1	......	93a	13†	49a	7	36a	5.09	......	2.20	0	8	a	4a	10a	......	S. A. Driver.
Ashland	Boyd	534	13	k72.2	......	93k	13	46	6	32k	3.02	......	0.83	0	8	6	8	16	e.	Forester Farley.
Beattyville	Lee	650	16	72.1	+ 0.1	94	12†	45	7	39	4.12	−0.59	1.35	0	7	13	12	5	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	c73.5	+ 1.0	94c	27†	46c	6	33c	3.14	−1.41	1.60	0	4	16c	6c	5c	sw.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	.....	......	......	......	......	......	......	3.30	......	1.05	0	6	....	....	....	......	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	......	......	......	......	......	......	3.15	−1.02	0.68	0	8	17	1	12	s.	J. V. Oldham.
Farmers	Rowan	668	12	.....	......	......	......	55	22†	......	4.94	+0.40	1.62	0	8	16	7	7	w.	Miss Catherine Evans.
Jackson	Breathitt	776	8	.....	......	......	......	......	......	......	5.13	+1.13	2.00	0	6	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	5	.....	......	......	......	......	......	......	4.25	......	1.00	0	6	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	16	.....	......	......	......	......	......	......	......	......	......	......	......	....	....	....	......	Miss Carrie S. Adams.
Maysville	Mason	524	22	72.0	− 0.9	95	13†	49	6	31	2.94	−1.39	0.90	0	7	19	0	11	sw.	Harry M. Robinson.
Middlesboro	Bell	1128	21	71.6	− 0.6	93	15	47	6	35	6.32	+1.78	3.10	0	7	15	14	1	......	B. H. Perkins.
Mount Sterling	Montgomery	930	30	71.0	− 1.4	93	12†	45	6	33	1.99	−3.14	0.73	0	8	17	8	5	w.	W. R. McKee.
Oliver	Greenup	......	0	.....	......	......	......	......	......	......	5.91	......	1.25	0	9	....	....	....	......	Percy Humphrey.
Pikeville	Pike	634	14	.....	......	......	......	......	......	......	6.06	+1.57	1.84	0	9	....	....	....	......	I. M. Williams.
Richmond	Madison	926	25	72.4	− 1.0	93	15	50	6†	34	2.93	−1.01	1.16	0	7	19	1	10	......	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	......	......	......	......	......	......	3.01	.....	0.51	0	11	....	....	....	......	Samuel Johnson.
Williamsburg	Whitley	939	22	72.4	− 1.1	94	16	49	7	34	4.27	−0.28	1.48	0	8	13	14	3	sw.	D. B. Bradley.
State averages and extremes		......	....	71.9	......	100	27	44	6	42	3.12	......	3.10	0	7	17	6	7	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

¶ Post-office address, Covington, Ky.

Daily Precipitation for June, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																	
Beaver Dam	G	.03	.25	.49	.87	.02																.16	.05										[illegible]
Blandville	M	T.	1.15	.61																.51		1.09									[illegible]		[illegible]
Calhoun	G	1.12	.76	.18	.92														T	T	T	.21									[illegible]		[illegible]
Farmington	G	.63	.37	.14	.92	.02												T			.02	.20	T										[illegible]
Greenville	G	.14	.95	.47	.27																	.17									[illegible]		[illegible]
Henderson ‖	O	2.30	1.00	.80	.28															T	T	.15	.50								[illegible]		[illegible]
Hopkinsville ‖	C	.26	.53	1.04	2.92	.02															.11	.09	.16										[illegible]
Marion	O	T.	.30	.22																T		.18											[illegible]
Mayfield ‖	M		.15	.50	1.68																.40	[illegible]	[illegible]										[illegible]
Owensboro	O	.21	.81	1.07	.58	.01												T		T	.19	.16	.27	T							T		[illegible]
Paducah (Lone Oak)	O		1.25	.60	.15															.17		.15	.15								.04		2.51
Paducah	O	T.		.98	.56															.10		.24	.20										[illegible]
Princeton	G	T.	T	.50	.21															.07		.12	.01								[illegible]		[illegible]
Russellville	G			.20	.40	.07														.22		T											[illegible]
Central Division.																																	
Alpha	C																																
Anchorage	O	T.	.14	.10	.86										.19			.12		T	.23	.17	T								.04		[illegible]
Bardstown	S	.23	.17	.90	.63	.03												.02			.23		.38										[illegible]
Bowling Green ‖	G	.47		.15	1.00	.05															.03	.10	.60										2.40
Brownsville ‖	G	.02		.76	1.40	.10												.16		.02		.08	.28										2.82
Burnside	C	.06	T	.53	1.80	1.08															.48	.44	.56										4.95
Camp Knox ¶	O	T.	.38	.19	.70	.01												.10		T.	.06	.17	.06								.02		1.72
Carrollton ‖ (Lock No. 1)	O	.07	.30	.27	.44	.66									.62	.13		T.			.54	.05	.43	.16									3.67
Cloverport ‖	O	.01	.07	.67	.76	.02												.01		T.	.14	T	.08										1.76
Eubank ‖	C		.32	.40	1.00	.42																.25	.75										3.14
Frankfort	K		.11	T	1.09	.64				T.					.68			.18		.16		.55											3.41
Franklin	G		.56	1.48	.50	.03														.09	.04	.40											3.10
Greensburg	G	.21	.22	.01	.85	.45	.03											.06			.18	T.	.68										2.69
High Bridge ‖	K		.15	.05	1.46	.20								.03						.12	.02	.63											2.66
Irvington	O	.06	T.	T.	.94	T.												T			T	.39									.04		1.43
Junction City	K	.42	.87	.15	1.55	.05												.06		.03	.06	.08	T										3.27
Leitchfield	G	.04	.20	*	1.02													T.		T	.05	.50									.06		1.87
Lexington ***	K	.02	.85	.20	.77	.03								.16	.11		.01			T.	.07	.11	.06								T		2.39
Louisville ***	O	T	.12	.28	.82									.13			.03			T.	.07	.23	T.								.04		1.72
Do. (Cherokee Park)	O		.04	T.	.78										.14			.04			.13	.14	.05								.13		1.45
St. John ‖‡	S	.10	T.	.98	.05													.05		T.	.11	T	.22										1.51
Scott	L	.04	.03	T.	1.18									.82	.19						.36	.22	.07	.05							T		2.96
Shelbyville	S			.22	1.11	.65									.55	.96		.12			.28	.01	.17										4.07
Taylorsville	S	.41	.57	.03	1.51	T.									.48			.02		.01	.12	.40	.47		T.						.34		4.39
Williamstown ‖	L		.23	.60	.96	.24									1.95	.02		T			.49		.20	.02									4.71
Woodbury ‡‖	G	.06		1.06	.81	.01												T.				.08	.06										2.08
Eastern Division.																																	
Ages	K	.28		T.	1.37	.50					.40										2.20	.26	.06	T						.62			5.69
Ashland	O			.61	.22	.83					.22					.05					T.	.60	.46	.03	T								3.02
Beattyville ‖	K			.17	1.35	1.13												T.			.28	.81	.12	.26									4.12
Berea	K	.08		.60	1.60																T.									.86			3.14
Cynthiana ‖	L			.20	1.05	.65				.25					.70			T.		T.	T.	T.	.45	T.									3.30
Falmouth ‖	L		.12	.34	1.03	.47									.68						.20	.18	.13										3.15
Farmers ‖	L			1.62	.62	.60									.25		T.		T.	.36		1.00	.56			.05							[illegible]
Jackson ‖	K	1.35	.08	.30	.50	2.00					T.							T.			T.	.90	T	T.									5.13
London ‡	C				.90	1.00															.40	.95	.75							.25			4.25
Louisa ‖	B																																
Maysville ‖	O			.30	.40	.56									.90						.12	T	.21	.45									2.94
Middlesboro	C		.08	1.05	1.32							.02								.50	3.10	.25											6.32
Mount Sterling ‖	L		T.	.03	.73	.35									.25			.02			.06	.15	.40			T.							1.99
Oliver ‖	O	.10		1.24	.34	1.25						.42			.55	.97					T.	.81	.23										5.91
Pikeville ‡	B				1.54	1.84					.48						.42	.12			.62	.84	.08							.12			6.06
Richmond	K		.28	T.	1.16	.94									.13		T.			T.	.05	.17	.20										2.93
Vanceburg ‖	O	.40		.40	.35	.32		.03		.02					.36						.05	.51	.40	.17									3.01
Williamsburg	C			.09	1.48	.62	.05									.09					.60	.71	.63	T.					T				4.27

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland. (T) Tennessee; (O) Ohio; (M) Mississippi.

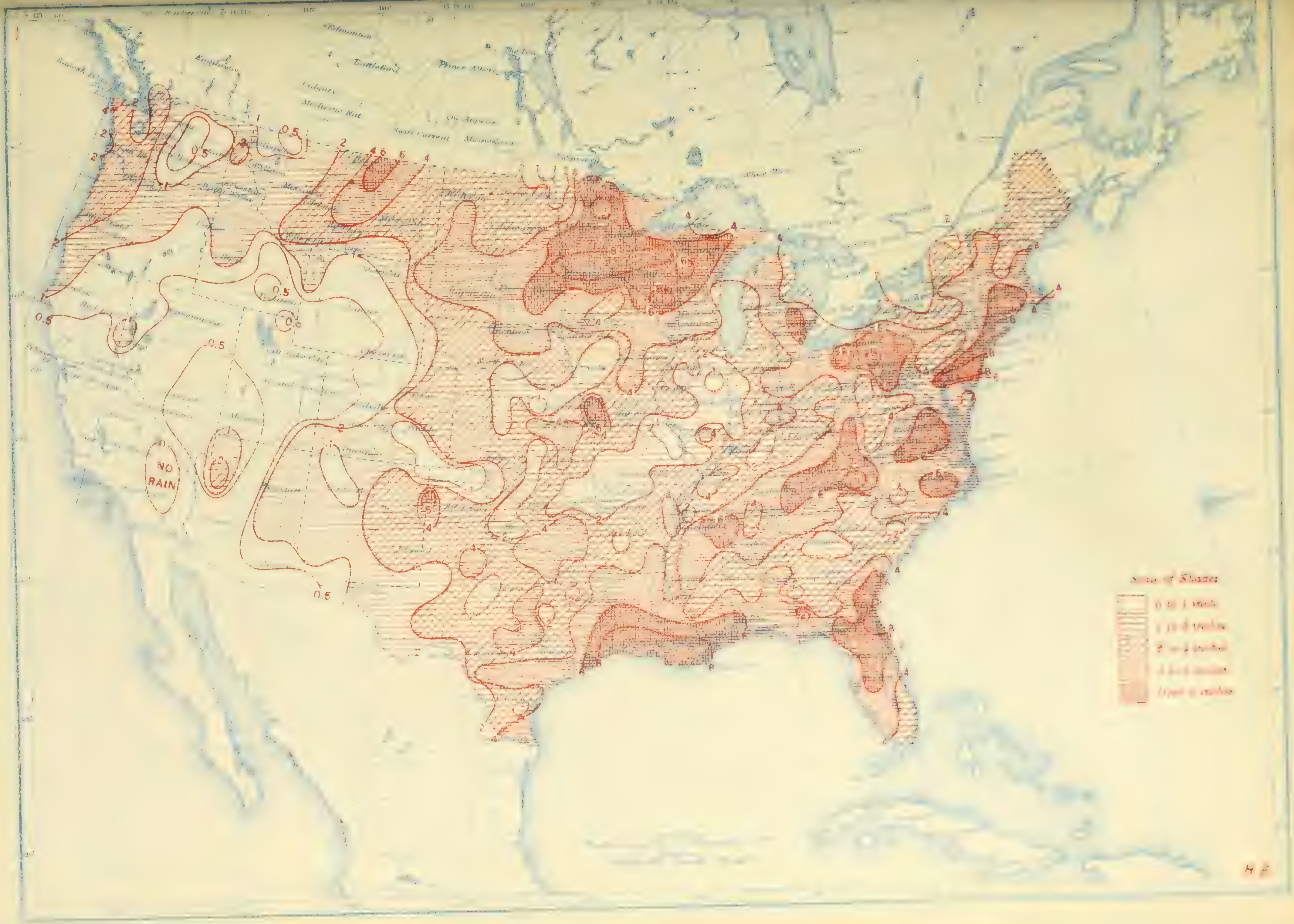
¶ Precipitation for 24 hours ending at 3 p. m.

Daily temperatures for June, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	77	89	71	66	78	79	83	87	92	93	95	94	95	95	95	94	81	78	74	75	76	81	85	89	89	89	94	95	93	87	..	85.6
	Minimum	64	64	62	61	57	51	49	53	60	63	68	67	60	64	66	71	59	54	61	60	57	54	52	54	56	55	57	65	66	68	..	59.8
Blandville	Maximum	85	87	69	71	77	79	80	85	89	90	92	91	93	95	92	92	82	73	74	78	76	79	80	87	88	89	93	89	89	86	..	84.3
	Minimum	63	65	62	60	57	58	57	55	61	65	69	68	63	65	68	72	66	55	57	58	56	56	55	59	63	67	64	69	66	70	..	62.3
Calhoun	Maximum	76	84	73	66	75	77	79	85	89	90	93	93	94	95	94	93	89	76	69	74	76	78	84	89	88	89	95	94	92	89	..	84.
	Minimum	63	60	62	60	56	52	52	53	61	64	64	67	61	64	67	72	65	52	60	58	56	55	53	55	60	57	58	66	68	70	..	60.4
Earlington	Maximum	77	86	68	66	78	81	83	89	91	93	97	95	98	98	98	96	81	78	74	77	77	80	86	92	92	93	96	96	97	85	..	86.6
	Minimum	63	63	62	61	58	48	48	50	59	62	62	66	59	61	69	73	62	52	62	59	56	55	51	55	56	56	57	68	67	72	..	59.7
Greenville	Maximum	76	84	74	..	75	77	78	84	90	89	92	89	92	93	94	93	85	77	72	..	75	78	84	87	90	87	100	94	92	90	..	[b]85.4
	Minimum	63	64	62	..	57	50	51	51	60	64	62	65	59	60	65	71	61	52	61	..	55	52	50	55	57	50	58	65	65	69	..	[b]59.1
Hopkinsville	Maximum	83	85	76	67	77	80	81	87	90	95	97	96	97	98	97	97	88	79	70	76	77	80	86	90	91	91	96	96	94	87	..	86.8
	Minimum	62	61	66	62	56	51	52	52	60	63	63	63	60	61	65	72	69	55	63	57	55	53	52	55	59	60	61	67	66	69	..	60.3
Marion	Maximum	79	80	67	65	75	80	80	86	88	88	91	89	93	92	92	91	86	80	75	76	74	70	83	85	90	90	93	90	90	81	..	83.3
	Minimum	62	67	61	60	56	55	54	59	67	69	70	70	68	67	69	73	55	51	60	60	57	56	55	62	68	62	68	71	69	70	..	63.0
Mayfield §§	Maximum	85	82	67	71	75	77	79	84	88	90	92	91	92	95	93	93	80	74	69	72	77	78	83	81	89	89	93	90	90	84	..	83.4
	Minimum	63	61	66	61	59	52	54	53	56	63	66	69	61	62	68	71	70	50	56	57	57	56	53	57	58	60	60	69	65	71	..	60.8
Owensboro	Maximum	73	81	68	65	76	81	81	86	90	89	92	90	92	93	93	93	83	82	73	74	72	75	83	88	89	91	93	92	90	83	..	83.7
	Minimum	63	64	63	61	57	57	56	56	64	66	66	69	64	68	69	71	67	57	60	58	58	55	53	59	64	60	61	67	68	69	..	62.3
Paducah (Lone Oak)	Maximum	86	84	81	79	77	76	78	80	86	92	91	94	97	99	98	98	94	79	78	77	79	78	88	89	90	91	95	96	96	89	..	87.2
	Minimum	58	60	62	59	56	55	58	60	66	65	60	66	67	68	70	71	68	53	58	57	60	55	54	58	60	62	60	63	64	72	..	61.5
Princeton	Maximum	81	36	72	67	77	81	75	85	86	92	93	92	94	95	95	94	85	76	73	76	76	78	85	89	90	90	93	93	92	85	..	84.9
	Minimum	63	63	64	61	57	50	53	51	76	63	63	67	59	61	65	68	70	53	60	60	56	52	50	55	59	58	59	68	63	68	..	60.5
Russellville§§	Maximum	80	78	87	70	74	75	81	83	89	91	93	92	94	94	95	95	94	77	66	73	74	79	83	87	87	88	93	93	91	85	..	84.7
	Minimum	54	63	60	62	57	52	50	51	59	62	62	65	59	60	65	69	67	56	59	59	57	55	54	56	57	56	56	60	69	68	..	59.3
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	81	84	74	66	77	76	80	86	92	91	93	92	94	94	93	93	82	77	72	65	70	77	82	87	85	87	92	93	92	84	..	83.7
	Minimum	64	65	61	56	55	44	47	48	58	66	62	61	58	65	67	68	60	47	54	58	49	54	48	54	57	55	55	61	67	65	..	57.6
Bardstown	Maximum	77	86	71	67	74	75	79	84	89	92	92	93	93	95	95	93	81	76	68	68	72	78	81	87	84	87	92	92	90	85	..	83.2
	Minimum	66	64	64	61	57	52	52	53	61	64	65	67	66	69	69	72	64	53	59	56	53	58	53	57	60	55	59	66	67	67	..	61.0
Bowling Green	Maximum	73	88	80	74	79	81	79	88	93	96	96	95	96	95	98	97	93	81	70	75	78	80	88	89	90	93	97	96	91	89	..	87.3
	Minimum	65	64	65	64	59	53	64	51	61	64	65	67	62	65	68	70	67	67	63	60	57	55	55	58	60	58	62	68	68	67	..	62.4
Camp Knox	Maximum	75	82	68	63	73	73	79	82	93	90	91	91	93	93	93	93	73	73	70	64	72	77	82	86	84	86	91	91	91	82	..	81.8
	Minimum	64	68	63	57	57	54	50	55	61	64	66	68	64	68	68	72	59	50	57	55	54	55	52	57	61	57	59	68	66	66	..	60.5
Eubank	Maximum	78	82	78	70	69	71	80	81	88	88	90	90	90	90	91	90	82	72	65	71	70	74	78	85	80	85	89	89	88	84	..	81.3
	Minimum	64	62	61	65	58	46	50	52	57	59	63	62	60	67	63	71	62	56	59	61	53	55	51	53	56	53	56	63	66	63	..	58.9
Frankfort	Maximum	77	87	74	73	73	73	79	83	88	92	93	93	93	88	93	93	88	74	72	74	71	78	78	82	83	84	91	92	91	86	..	83.2
	Minimum	68	63	67	59	57	51	50	54	60	65	66	67	63	67	70	71	63	56	57	61	55	56	55	57	58	56	58	63	66	66	..	60.8
Franklin	Maximum	85	84	78	75	76	74	79	83	88	91	96	93	96	97	97	95	87	78	70	70	71	80	85	90	88	90	93	94	93	85	..	85.4
	Minimum	64	64	64	65	58	53	50	54	61	63	65	68	56	61	60	63	62	49	51	51	49	55	50	52	54	48	62	61	61	60	..	57.8
Greensburg	Maximum	77	83	78	73	72	73	77	82	87	..	..	..	..	90	90	91	82	73	69	69	71	76	78	84	83	84	88	87	87	84	..	[d]80.3
	Minimum	63	59	61	61	56	58	47	50	58	..	..	..	..	..	70	65	64	53	59	59	52	53	51	53	52	51	56	62	66	62	..	[c]57.6
Irvington	Maximum	75	84	72	72	74	75	77	82	88	89	89	89	90	91	91	91	84	74	71	68	73	76	80	84	84	85	89	90	89	84	..	82.0
	Minimum	66	66	65	59	58	55	54	54	64	66	66	69	62	68	70	72	64	52	59	59	53	56	54	59	64	58	61	68	67	71	..	62.0
Junction City	Maximum	74	83	75	70	72	72	79	84	88	89	91	90	90	92	91	90	87	76	73	71	71	77	79	86	83	87	91	91	90	88	..	82.7
	Minimum	61	63	62	63	56	48	47	51	60	61	63	64	59	67	65	71	64	53	56	62	55	55	53	51	55	51	54	68	67	69	..	59.1
Leitchfield	Maximum	74	82	70	67	75	76	80	83	88	..	91	91	91	90	92	92	84	75	68	70	70	75	79	87	86	87	92	91	90	82	..	[a]82.0
	Minimum	65	64	63	59	57	54	52	54	61	..	63	68	60	66	66	68	64	54	60	59	56	54	53	57	63	58	59	66	65	66	..	[a]60.5
Lexington	Maximum	73	83	71	62	69	69	77	81	87	88	89	88	89	89	90	89	76	72	66	68	68	73	76	82	80	83	90	89	87	82	..	79.5
	Minimum	65	64	62	56	54	52	55	63	67	72	73	73	69	68	72	72	59	53	56	56	55	57	56	63	62	62	67	70	71	69	..	63.1
Louisville	Maximum	78	81	69	62	74	75	77	83	89	90	91	91	92	93	93	92	78	75	71	66	67	76	81	85	84	86	92	92	90	79	..	81.7
	Minimum	68	67	62	57	58	58	55	57	69	74	70	74	70	70	72	71	58	52	60	58	55	57	56	62	63	61	64	71	73	72	..	63.8
Do. (Cherokee Park)	Maximum	77	80	72	67	72	72	74	81	85	86	88	88	89	87	89	89	87	74	70	68	70	74	77	81	80	82	86	88	87	85	..	80.2
	Minimum	66	65	63	57	56	53	52	54	63	66	66	68	63	68	73	79	62	51	58	58	53	56	55	57	60	57	59	64	70	70	..	61.4
St. John	Maximum	75	85	64	70	75	73	81	85	90	90	92	92	93	92	93	93	83	74	74	68	72	78	81	87	84	86	92	93	92	85	..	83.1
	Minimum	66	64	58	56	51	51	51	66	66	70	63	74	59	66	66	72	69	53	52	59	52	53	51	55	59	56	58	64	66	68	..	60.5
Scott	Maximum	76	81	72	67	69	73	78	85	89	89	90	90	90	83	90	88	81	72	71	70	67	74	77	83	79	83	89	92	88	83	..	80.6
	Minimum	66	64	62	52	55	50	48	53	59	68	68	69	65	65	68	68	60	50	54	58	52	55	54	56	56	55	58	61	69	70	..	59.6
Shelbyville	Maximum	77	85	71	69	74	68	77	84	86	89	87	92	90	88	86	93	88	76	67	70	71	78	77	81	83	86	88	94	90	87	..	81.7
	Minimum	63	60	61	56	54	48	47	50	58	63	64	65	60	64	66	66	59	48	51	56	50	52	49	55	56	52	56	62	62	61	..	57.1
Taylorsville	Maximum	79	82	71	69	74	74	80	83	89	91	92	91	93	91	92	94	85	74	68	68	71	76	83	84	82	85	91	91	91	84	..	82.6
	Minimum	65	61	63	59	57	49	48	51	58	62	63	64	58	67	67	70	63	51	55	59	51	55	51	55	58	54	55	61	63	63	..	58.5
Williamstown	Maximum	76	82	76	67	77	74	78	85	91	91	93	92	93	87	91	89	84	76	78	71	69	75	79	83	82	84	90	93	89	82	..	82.6
	Minimum	65	63	62	54	53	48	52	55	62	67	69	70	66	66	69	72	59	49	52	57	53	54	53	58	62	56	61	67	69	65	..	60.3
Eastern Division																																	
Ages	Maximum	84	84	83	72	68	..	78	85	90	89	90	91	93	93	92	92	87	76	72	72	75	78	80	86	85	85	89	89	89	87	..	[a]83.9
	Minimum	63	61	62	64	62	..	49	55	54	58	66	65	65	65	66	65	65	62	56	62	54	56	59	56	55	53	59	62	64	66	..	[a]60.3
Ashland	Maximum	84	88	76	78	62	71	78	83	85	90	91	90	93	..	..	..	..	..	..	..	..	..	..	..	79	83	88	91	91	86	..	[k]83.5
	Minimum	63	67	65	57	56	46	50	52	58	66	66	66	67	70	72	70	61	59	56	62	58	54	57	58	59	54	56	62	68	68	..	60.8
Beattyville	Maximum	84	91	85	73	67	73	84	85	91	92	92	94	94	93	94	94	85	77	68	70	72	80	83	87	82	89	91	93	93	89	..	84.8
	Minimum	62	61	63	63	58	48	45	53	57	60	65	62	63	66	66	62	62	57	54	61	57	55	55	55	55	52	77	63	64	61	..	59.4
Berea	Maximum	76	87	78	72	72	73	82	82	84	89	93	91	92	92	91	93	93	84	72	70	85	..	..		82	87	94	94	89	88	..	[c]84.6
	Minimum	66	66	64	62	58	46	52	54	61	61	61	67	64	67	75	70	66	62	60	56	55	..	..	.	54	54	71	77	68	68	..	[c]62.4
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	64	68	68	61	60	58	58	56	63	64	65	66	66	63	69	66	62	57	56	64	57	55	55	57	60	60	65	65	64	61	..	61.8
Maysville	Maximum	82	87	78	72	67	74	79	84	90	94	93	94	95	89	95	93	82	77	72	73	71	78	77	82	84	84	89	93	92	85	..	83.5
	Minimum	62	64	65	57	56	49	52	55	60	65	67	68	67	67	71	72	62	57	55	61	53	54	55	58	58	55	59	62	67	66	..	60.6
Middlesboro	Maximum	84	85	77	76	76	75	83	83	87	87	91	90	91	90	93	92	90	77	71	70	71	79	77	84	83	87	87	88	90	88	..	83.4
	Minimum	60	63	64	64	63	47	48	55	54	57	63	63	64	63	65	61	69	62	58	62	54	58	58	58	57	52	60	63	62	64	..	59.7
Mount Sterling	Maximum	81	88	77	65	67	70	80	84	88	90	88	93	92	90	92	92	81	75	68	71	71	78	79	84	81	83	89	93	92	89	..	82.4
	Minimum	64	62	63	57	55	45	47	52	63	66	67	67	70	67	70	70	59	53	55	60	52	53	54	54	55	53	56	65	66	64	..	59.5
Richmond	Maximum	76	86	78	73	69	75	79	82	88	90	91	91	92	91	93	92	85	76	70	69	69	75	78	84	84	86	90	92	90	86	..	82.7
	Minimum	66	64	64	63	57	50	50	56	54	68	71	70	68	68	71	72	64	59	58	62	55	57	57	58	59	58	61	69	70	68	..	62.2
Williamsburg	Maximum	80	85	82	71	67	76	81	85	88	91	89	92	92	93	93	94	89	78	69	73	73	79	82	86	84	87	89	90	90	89	..	83.9
	Minimum	65	62	64	65	61	52	49	56	57	60	65	65	65	64	66	66	67	62	57	62	57	57	59	58	58	53	61	65	65	64	..	60.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
NO RAIN
0.5
1
2
4
6
Edmonton
Battleford
Prince Albert
Calgary
Medicine Hat
Swift Current
Moose Jaw
Kamloops
H.E.

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

JULY, 1920.

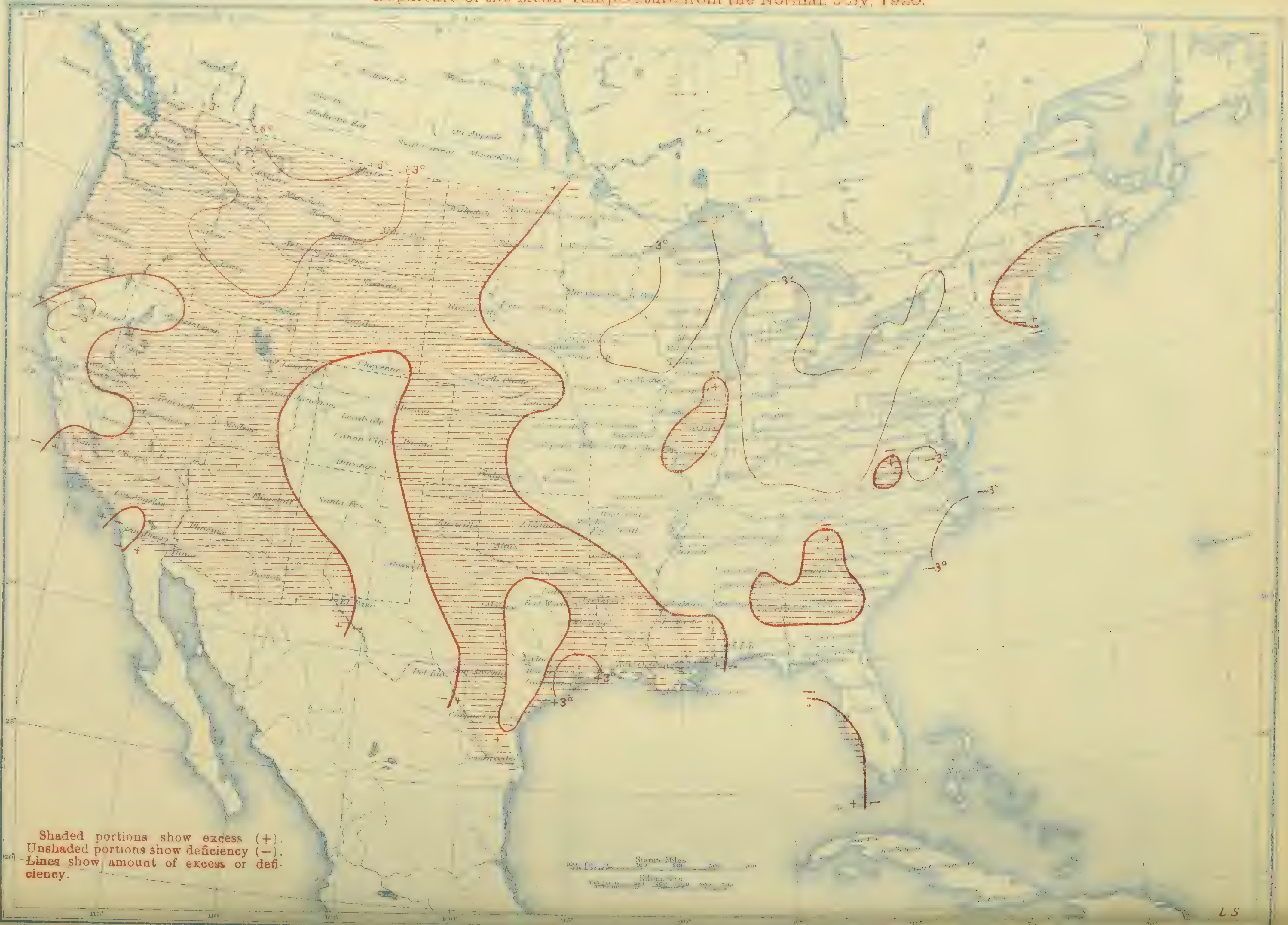
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
SEPTEMBER 18, 1920.

Departure of the Mean Temperature from the Normal, July, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

VOL. XXV. LOUISVILLE, KY., JULY, 1920. No. 7

GENERAL SUMMARY.

Low temperature and deficient precipitation were the principal features of the month's weather. Minimum temperatures in the 50's occurred frequently at most stations; while maximum temperatures, except at a few stations in the western counties, reached 90 on only a few days. Persistent cloudiness played an important part in keeping the maximum temperatures low.

Precipitation averaged somewhat below normal for the State, but it was so unevenly distributed that there were large areas where the amount received was less than half the normal rainfall. In some localities the moisture was sufficient to keep the crops growing, but in many districts the drought retarded growth and will delay considerably the time of maturity. The prevailing low temperature was rather favorable than otherwise, enabling the crops to better withstand the drought. The unusual lateness of corn and tobacco, and the excellent state of cultivation made possible by the favorable weather, were also important factors in preventing serious injury from lack of moisture. The harvesting of hay and oats, and threshing grain, were finished under conditions nearly ideal, the quality of these crops being much improved by the dry weather. The early potato crop was short, and gardens and pastures deteriorated. Late tobacco grew slowly and unevenly, for there had never been sufficient moisture, except in restricted localities, to start it to growing properly since it was transplanted early in June. The month ended with crops in need of rain in practically all districts.

PRESSURE.

High pressure areas moving from the northwest and settling down over the eastern and southern states dominated weather conditions during the month. One low pressure area of considerable strength moved across the central valleys on the 6-7th, causing good rains over most of this State; but the other "lows" were only shallow troughs between the northwestern and southeastern "highs." Rainfall in the form of scattered local showers resulted from this pressure distribution, the characteristic summer condition over this State, when the high pressure areas settle and remain practically stationary over the east Gulf states.

The mean sea-level pressure, based on the reports of two stations was 30.04 inches. The extremes were 30.26 inches at Lexington on the 13th, and 29.72 inches at both stations on the 24th.

TEMPERATURE.

The average temperature for the month, 39 stations reporting, was 75.2°, which is 1.5° below normal. This was the fourth consecutive month with mean temperature considerably below the seasonal average. Unseasonably low minimum temperatures occurred in the periods 5-12th, 16th-21st, and 26-29th. The 27th was a remarkably cool day, minimum temperatures at many stations being below 50°. Other noteworthy features were the persistently low maximum temperatures and the large daily range during the cooler periods. The extremes at the various stations were 99° on the 24th at Lone Oak, and 44° on the 27th at Franklin.

PRECIPITATION.

Precipitation for the State, determined from the reports of 57 stations, averaged 3.85 inches, which is 0.45 inch below normal. Occurring principally in the form of local thundershowers, large areas were missed repeatedly, or the showers were too light over such districts to be of much benefit. Periods with showers were 1st-7th, 11th, 14-16th, 18-19th, and 24-25th. The monthly rainfall was lightest over the lower Kentucky River basin and in Christian County, where it was less than 2.00 inches. It was heaviest over restricted areas in the extreme northeastern counties, ranging between 5.00 and 8.00 inches. Over most of the State it ranged between 3.00 and 4.00 inches. Thunderstorms were of frequent occurrence and locally damaging in a few cases.

WIND.

The total wind movement at Louisville was 7,179 miles, and at Lexington 8,662 miles, with average hourly velocities of 9.6 and 11.6 miles, respectively. The maximum velocity for five minutes was at the rate of 44 miles per hour at Louisville and 37 miles at Lexington, from the northwest on the 3d at both stations.

HUMIDITY.

At Louisville the mean relative humidity at 7 a. m. was 75 per cent, at 12 noon 52 per cent, and at 7 p. m. 59 per cent.

SUNSHINE AND CLOUDINESS.

The percentage of possible sunshine at Louisville was 69 and at Lexington 66.

MISCELLANEOUS

July 6.—Considerable damage was caused by washing of streets and flooding cellars by an excessive rain at Bowling Green.

July 14.—A heavy local wind and rainstorm caused damage to crops near Williamstown. The covered bridge over Salt River and other buildings in or near Taylorsville were unroofed by a local windstorm, and much corn was blown down in that vicinity. A man was stunned by lightning at Louisville.

July 16.—Near Hopkinsville a man was killed by lightning while sitting on a pile of hay.

Rivers.—The streams of the State, including the Ohio, were at low stages during the month.

COMPARATIVE DATA FOR JULY.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain.
1889	75.1	−1.6	98	50	5.62	+1.32	
1890	73.0	−3.7	101	44	2.66	−1.64	
1891	74.0	−2.7	91	47	4.08	−0.22	
1892	76.5	−0.2	100	48	3.30	−1.00	
1893	78.8	+2.1	101	50	3.48	−0.82	..
1894	76.2	−0.5	105	43	2.03	−2.27	..
1895	75.2	−1.5	99	49	5.75	+1.45	9
1896	77.4	+0.7	103	47	7.44	+3.14	11
1897	77.8	+1.1	107	50	4.79	+0.49	10
1898	77.8	+1.1	102	48	4.71	+0.41	11
1899	77.3	+0.6	100	47	3.78	−0.52	9
1900	77.9	+1.2	101	50	4.91	+0.61	11
1901	81.7	+5.0	112	48	1.72	−2.58	5
1902	78.1	+1.4	107	48	1.91	−2.39	6
1903	77.5	+0.8	104	49	3.53	−0.77	8
1904	75.2	−1.5	99	46	3.40	−0.90	10
1905	75.9	−0.8	102	52	5.93	+1.63	13
1906	75.2	−1.5	100	51	6.02	+1.72	11
1907	78.1	+1.4	102	40	4.71	+0.41	9
1908	76.9	+0.2	100	50	3.94	−0.36	10
1909	74.8	−1.9	99	48	6.01	+1.71	11
1910	76.2	−0.5	96	51	8.63	+4.33	16
1911	75.8	−0.9	105	42	2.28	−2.02	7
1912	76.8	+0.1	100	53	5.50	+1.20	12
1913	79.9	+3.2	109	48	2.54	−1.76	7
1914	78.8	+2.1	109	43	3.20	−1.10	6
1915	75.7	−1.0	102	49	5.30	+1.00	11
1916	78.6	+1.9	102	52	4.17	−0.13	9
1917	75.3	−1.4	100	50	4.38	+0.08	11
1918	73.8	−2.9	103	46	3.28	−1.02	8
1919	79.5	+2.8	104	50	2.10	−2.20	5
1920	75.2	−1.5	99	44	3.85	−0.45	9

Climatological data for July, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	76.4	− 0.9	97	24	51	27	38	3.03	−1.36	1.09	0	10	24	1	6	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	77.8	− 0.1	96	4	57	27	32	4.10	+0.21	2.02	0	10	14	15	2	sw.	E. W. Horr.
Calhoun	McLean	437	16	76.2	− 1.6	96	3	55	27†	36	6.12	+1.53	1.49	0	10	12	17	2	sw.	W. A. Taylor.
Earlington	Hopkins	420	29	77.0	− 1.4	97	3†	50	27	38	3.53	−0.57	1.09	0	10	24	0	7	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	^{c}75.8	.....	94^{c}	1^{+}	50^{c}	27	35^{c}	5.20	.....	2.45	0	9	13^{c}	14^{c}	1^{c}	w.	C. R. Lovell.
Henderson	Henderson	327	12	.....	.....	.....	.....	.....	.....	.....	4.04	+0.28	1.10	0	8	.....	.....	.....	.....	W. W. Shelby.
Hopkinsville	Christian	524	23	77.8	− 1.0	98	24	52	27	41	1.80	−2.23	0.99	0	9	12	3	16	sw.	W. E. Graves.
Marion	Crittenden	571	21	77.0	− 0.8	93	3†	55	27	28	3.23	−0.70	0.78	0	7	14	13	4	sw.	B. C. Paris.
Mayfield	Graves	364	10	^{a}76.8	− 0.8	98^{a}	3	52a	27	34	4.77	−0.12	2.40	0	6	6a	17a	7a	s.	J. N. Davis.
Owensboro	Daviess	479	23	75.7	− 2.3	95	24	54	29	34	3.94	+0.09	1.25	0	10	24	2	5	s.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	80.2	.....	99	24	53	27	36	4.15	.....	2.00	0	6	26	2	3	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	.....	.....	.....	.....	.....	.....	4.16	+0.18	2.20	0	5	.....	.....	.....	.....	Frank L. Brown.
Princeton	Caldwell	529	10	76.8	− 1.8	96	24	54	27†	37	4.90	+1.49	1.18	0	10	7	23	1	s.	Dr. W. L. Cash.
Russellville	Logan	590	6	^{f}77.1	− 0.6	95^{g}	3	57^{f}	9^{f}	33^{f}	3.20	−1.81	1.25	0	6	15^{f}	5^{f}	5^{f}	s	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	.....	.....	.....	.....	.....	.....	.....	4.09	−1.61	1.20	0	7	5	17	9	w.	Frank Hicks.
Anchorage	Jefferson	700	19	74.2	− 1.8	98	24	48	27†	40	2.34	−2.10	1.27	0	8	19	10	2	sw.	C. E. Barret.
Bardstown	Nelson	637	23	75.1	− 3.4	96	24	51	28	37	2.97	−1.51	1.67	0	8	22	3	6	e.	Chas. M. Talbott.
Bowling Green	Warren	500	29	77.6	− 1.3	98	1^{+}	56	28^{+}	37	6.71	+2.25	5.05	0	10	15	12	4	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	.....	.....	.....	.....	.....	.....	3.05	.....	0.95	0	11	.....	.....	.....	.....	James H. Young.
Burnside	Pulaski	773	27	.....	.....	.....	.....	.....	.....	.....	3.78	−1.15	1.16	0	8	.....	.....	.....	.....	F. E. Bradshaw.
Camp Knox	Hardin	.....	0	74.8	.....	95	23†	54	27	35	2.93	.....	1.01	0	9	7	11	13	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	.....	.....	.....	.....	.....	.....	.....	2.04	−1.36	0.90	0	5	.....	.....	.....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	.....	.....	.....	.....	.....	.....	5.17	.....	1.30	0	10	.....	.....	.....	.....	W. A. Cockerill.
Eubank	Pulaski	1177	25	72.4	− 2.3	91	3	50	28	37	4.13	−0.50	2.62	0	6	10	13	8	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	75.2	− 1.7	98	24	52	27†	35	1.85	−2.26	0.71	0	8	20	2	9	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	73.6	− 3.9	98	5	44	27	41	4.03	−0.08	2.10	0	6	20	8	3	s.	B. V. Hunt.
Greensburg	Green	581	27	73.0	− 3.4	93	24	47	27†	39	3.47	−1.12	0.97	0	10	13	5	13	sw.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	.....	.....	.....	.....	.....	.....	3.45	−1.07	1.50	0	9	.....	.....	.....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	75.0	− 2.4	95	24	56	27†	30	5.07	−1.52	2.56	0	9	18	9	4	sw.	W. J. Piggott.
Junction City	Boyle	985	26	73.6	− 1.4	93	23	49	28	40	3.95	−0.28	0.93	0	13	13	13	5	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	74.6	− 2.0	95	24	55	27	32	5.03	+0.89	2.10	0	6	16	14	1	sw.	John E. Stone.
Lexington	Fayette	989	32	74.4	− 2.2	93	24	53	26	26	1.73	−2.71	0.69	0	10	11	14	6	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	76.2	− 2.4	95	24	57	27	27	2.13	−1.61	0.65	0	9	16	9	6	sw.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	73.7	− 2.8	93	24	54	26^{+}	28	2.02	−3.60	0.65	0	8	19	8	4	w.	Wm. I. Hunt.
St. John	Hardin	777	23	75.0	− 0.7	98	24	52	27	36	3.17	−0.38	1.50	0	8	26	2	3	.....	Sisters of Loretto.
Scott ¶	Kenton	900	22	73.0	− 3.6	95	23	51	28	34	2.76	−0.58	0.91	0	11	12	16	3	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	72.6	− 4.3	98	23	48	27	39	1.95	−2.15	0.92	0	7	13	16	2	ne.	F. A. Miller.
Taylorsville	Spencer	489	17	73.6	− 2.7	96	23^{+}	48	27^{+}	38	2.02	−2.62	1.03	0	9	17	9	5	sw.	E. D. Bourne.
Williamstown	Grant	943	17	73.8	− 1.8	95	23†	50	27	35	2.38	−1.68	0.80	0	6	16	9	6	.....	Mrs. E. S. Humlong.
Woodbury	Butler	533	2	.....	.....	.....	.....	.....	.....	.....	3.91	.....	1.29	0	12	.....	.....	.....	.....	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	76.0	.....	93	13	56	10	30	5.16	.....	1.41	0	11	12	7	12	sw.	S. A. Driver.
Ashland	Boyd	534	13	73.4	.....	94	23	52	27	32	4.34	.....	1.23	0	10	11	16	4	w.	Forester Farley.
Beattyville	Lee	650	16	74.8	− 0.6	97	30	49	27	40	3.54	−1.49	1.71	0	11	14	11	6	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	.....	.....	.....	.....	.....	.....	.....	2.10	.....	1.10	0	5	.....	.....	.....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	.....	.....	.....	.....	.....	.....	3.34	−0.41	1.02	0	7	20	5	6	s.	J. V. Oldham.
Farmers	Rowan	668	12	.....	.....	.....	.....	.....	.....	.....	6.28	+0.98	1.90	0	7	18	10	3	e.	Miss Catherine Evans.
Jackson	Breathitt	776	8	.....	.....	.....	.....	.....	.....	.....	4.92	+0.89	1.85	0	11	.....	.....	.....	.....	Jas. L. McCoy.
London	Laurel	1190	5	.....	.....	.....	.....	.....	.....	.....	5.03	.....	1.10	0	7	.....	.....	.....	.....	C. R. Lee.
Louisa	Lawrence	584	16	.....	.....	.....	.....	.....	.....	.....	2.94	−0.42	0.68	0	10	.....	.....	.....	.....	Miss Carrie S. Adams.
Maysville	Mason	524	22	74.1	− 2.9	97	24	52	26	32	7.92	+3.38	2.00	0	10	14	3	14	w.	Harry M. Robinson.
Middlesboro	Bell	1128	21	74.3	− 0.4	93	24	53	28^{+}	35	4.88	−0.62	1.25	0	11	22	9	0	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	30	73.6	− 2.2	94	24	50	28	37	3.97	−1.09	1.37	0	11	17	12	2	w.	W. R. McKee.
Oliver	Greenup	.....	0	.....	.....	.....	.....	.....	.....	.....	5.29	.....	2.00	0	7	.....	.....	.....	.....	Percy Humphrey.
Pikeville	Pike	634	14	.....	.....	.....	.....	.....	.....	.....	3.82	−0.17	1.42	0	7	.....	.....	.....	.....	I. M. Williams.
Richmond	Madison	926	25	74.8	− 2.1	92	23^{+}	53	27	31	5.47	+1.60	2.92	0	9	18	4	9	.....	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	.....	.....	.....	.....	.....	.....	5.81	.....	1.67	0	11	.....	.....	.....	.....	Samuel Johnson.
Williamsburg	Whitley	939	22	75.4	− 1.4	94	24	52	27	34	2.53	−3.34	0.69	0	7	13	14	4	sw.	D. B. Bradley.
State averages and extremes				75.2	.....	99	24	44	27	41	3.85	.....	5.05	0	9	16	9	6	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

$^{+}$ Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

¶ Post-office address, Covington, Ky.

Daily Precipitation for July, 1920.

Stations	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam ‖ G.	.20	.02	.02	.90		.17	.07								.11				1.09				.07		.35							3.03
Blandville M.		1.02				.40		.03		.02				.06			.35	.03	2.02					.06		T.					.11	4.10
Calhoun G.	.08	.10		1.49	1.20	.75	.04				T		T	.27	T		T		1.43			.52		.24								6.12
Earlington ‖ G.	.25	.07	.11	.02		1.09	.41				T				.46			.37	.66			.09			T							3.53
Greenville G.		.11		1.20	2.45	.10	.10							.11			.18	.91				.04										5.20
Henderson ‖ O.	.35	.20		.75		1.10									1.00				.42			.12	.10									4.04
Hopkinsville C.	.08	.18	.12			.06	.07								.09	T		.16	.99			.05										1.80
Marion O.		.31			.15	.60								.45			.39		.55			.78		T								3.23
Mayfield ‖ M.	.41	.15			2.40		.20												.93				.35									4.44
Owensboro ‖ O.	1.25	.14		.92		.50	.02							.01	.29				.68			T	.07		.06							3.94
Paducah (Lone Oak) O.		.56				2.00								.51					1.06				.01	.01		T						4.15
Paducah ‖ O.		.50					2.20								.76				.60				.10		T							4.16
Princeton ‡ G.		.17			1.15	.22		T		T.	.15		T	.87	T		.02	T	1.18			.01		.02	T.	T					1.11	4.90
Russellville ‖ G.		T				1.05	.04								.22			1.25		.34			.30									3.20
Central Division.																																
Alpha C.		T.	.26		.20		1.20		.05		.85			.46		T.		1.07	T.													4.09
Anchorage O.		.18	.05		T.	.04	.51				.04			1.27					T.			T.		.22							.03	2.34
Bardstown S.	.38		.20			.05	.20				.08				1.67				.33						.06							2.97
Bowling Green ‖ G.	.07		.15	.10		5.05	.07								.11	.08	.28		.25						.55							6.71
Brownsville ‖ G.	.05	.02	.04	.22		.32	.20		.04					.21	.40				.60						.95							3.05
Burnside ‖ C.		.16	T.	.02		T.	1.16	.62			.78				T.			.79	.22						.03							3.78
Camp Knox¶ O.		.03		.57		.21	.68				.11			.01	.20		T.		.11				T.		1.01							2.93
Carrollton ‖ (Lock No. 1) O.	T.		T.	.01							.01			.54	.90										.58							2.04
Cloverport ‖ O.	.26	.06	.02	.60		.95	.65				T.	T		.02	.02				1.30						1.29							5.17
Eubank ‖ C.		.03					2.62				.45				.53			.34	.16													4.13
Frankfort ‖ K.	T.	.01	.12	T.			.71	.07	T.		.12			.06	.66				T.						.10							1.85
Franklin G.		.17			2.10		.10							.10			.63								.93							4.03
Greensburg G.	T.	.15	.03	.42		.32	.78				.32			.05	.97			.38	.05						T.							3.47
High Bridge ‖ K.	.23	.01	.12	.18			1.50	.10			.18	.05			1.08																	3.45
Irvington O.		.13		.37	.20	.09	.47				T.		.76	.07			T.		.42					2.56								5.07
Junction City K.	.93	.22				.39	.50				.29		.08	.36	.10	.03	.16	.48						.38	.03							3.95
Leitchfield G.		T.	.85		.35	.07					T.		T	1.11				.55						2.10								5.03
Lexington *** K.		.07	.18			.66	.03	T			.18			.13				.31				.02		.02							.13	1.73
LOUISVILLE*** O.		.07	.11		.03	.58		T.			.09		.01	.65	T.			.12				T.		.47							T	2.13
Do. (Cherokee Park) O.		.08	.07		T.		.55	T.			.06		.09		.65				.09					.43								2.02
St. John ‖ S.	T.	T.		.12		.30	.04				.01			T	.59	.01			.60						1.50							3.17
Scott L.		.13	.12			.39	.37	.20			.09			.36	.01			T.	.11					.07								2.76
Shelbyville ‖ S.			.05				.55	.02	T.		.11				.92				.20						.10							1.95
Taylorsville S.		.17	.23		T.	.20	.18				.08			1.03	.01		.01	T.	.05					T								2.02
Williamstown ‖ L.	T.		.02				.80		.20		.10				.55										.71							2.38
Woodbury ‖ G.	.06	.02	.02	.12		1.29	.03							.41	.17		.06	.08	.85						.80							3.91
Eastern Division.																																
Ages K.	.65	.05				.27	1.03	T.			1.41			.27	.08	.29	.16	.11	.84						T.							5.16
Ashland O.	.31		1.23				.72	.07	.25		.33	.40			.15	.13									.75							4.34
Beattyville ‖ K.	.23	.02	.17	T.			1.71	.06	T.		.08	T			.74	.10		.08	.30						.05							3.54
Berea K.																																
Cynthiana ‖ L.		T.	T.				1.10		.15		T.	T.	.05		.30					T.		.50		T.	T.							2.10
Falmouth L.				.11			1.01	.45			.16			.17	1.02								T.		.42							3.34
Farmers ‖ L.	.95						1.90	T	.55		.20	T.			.19				.80						1.69							6.28
Jackson ‖ K.	1.85	T.	.51	T.			.27	.10	.07		.02	.55			.32			.29	.32						.62							4.92
London ‖ C.							.80	.80			.70	.28					.40	.95	1.10													5.03
Louisa B.	.27		.25				.68	.65	.36		.25	.18			.07				.06						.17							2.94
Maysville ‖ O.	.68	.16	.67	.27			2.00	.28	T		.33	T.			.45				1.54						1.54							7.92
Middlesboro C.	1.20	.15				.07	.43				.60				.25	.80	.07	.03	1.25						.03							4.88
Mount Sterling ‖ L.	T.	.11	T.	.13		T.	1.37	.20	.05		.89	.03			.83			.03	.28				T.		.05							3.97
Oliver ‖ O.		T	.68			T.	2.00	1.07			.34				.23				.05						.92							5.29
Pikeville ‖ B.	.42		.84				.52	.32			.18				.12										1.42							3.82
Richmond K.		.17	.11	T.			2.92	.01			1.22				.73			.04	.25				.02									5.47
Vanceburg ‖ O.	.12	.40	.70	.21		.05	1.67	.12			.53				1.15				.76						.10							5.81
Williamsburg ‖ C.		T.		.08			.43	.11			.20	.59					T.	.43	T	.69												2.53

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland (T) Tennessee; (O) Ohio; (M) Mississippi

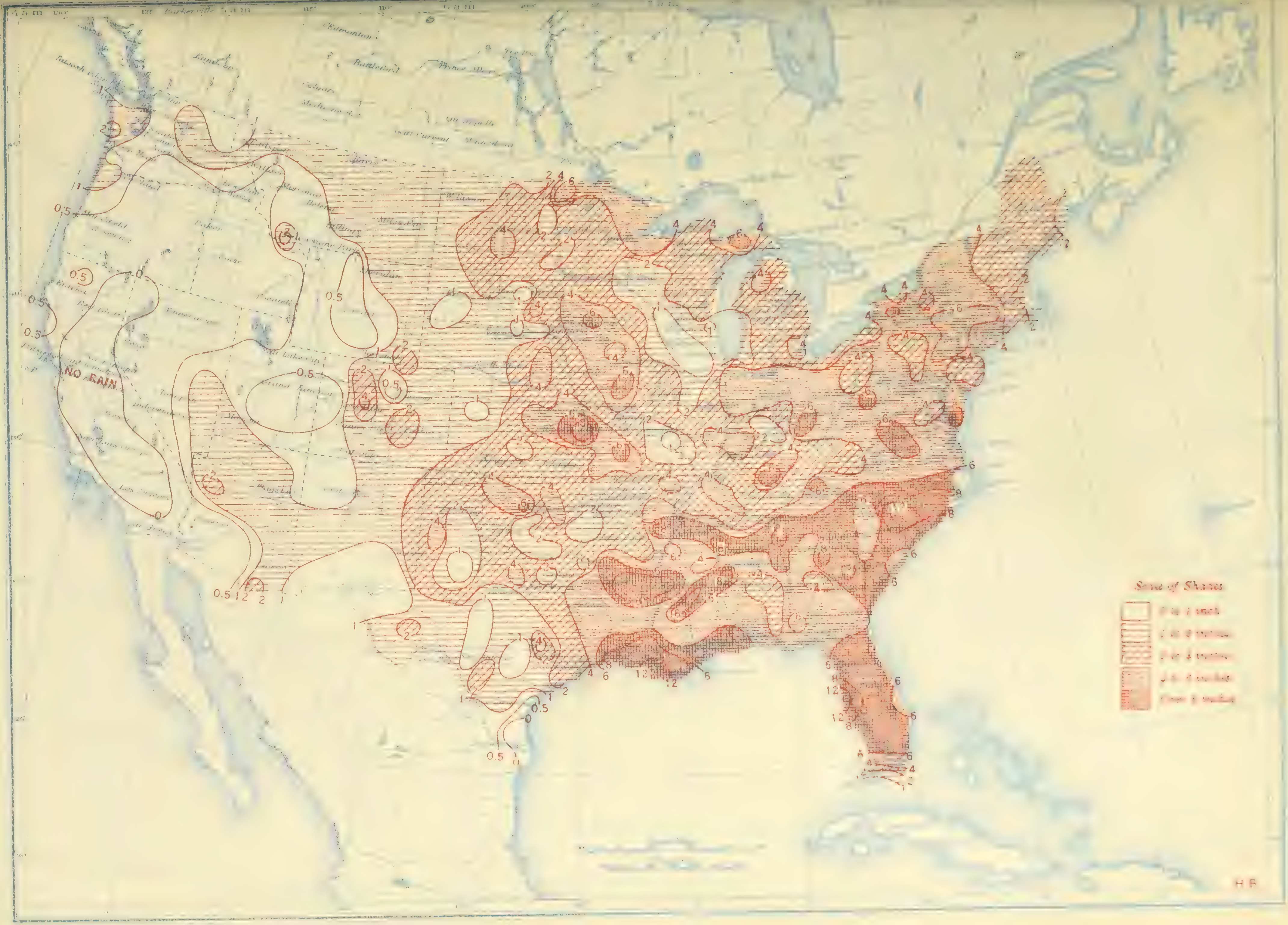
¶ Precipitation for 24 hours ending at 3 p. m

Daily temperatures for July, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	94	90	96	93	92	88	84	90	86	83	88	81	95	94	91	91	88	94	85	88	91	96	96	97	83	77	84	87	91	95	95	89.8
	Minimum	69	68	65	65	64	68	71	63	56	60	64	60	65	67	68	68	64	69	65	60	60	69	59	70	56	58	51	53	53	60	64	63.0
Blandville	Maximum	90	93	94	96	91	84	88	84	85	80	87	88	91	91	92	92	88	92	82	89	92	93	93	93	82	74	81	86	91	91	90	88.5
	Minimum	69	68	70	70	72	72	67	63	60	65	59	64	70	71	69	69	72	71	61	69	72	71	71	75	66	64	57	59	59	65	68	67.0
Calhoun	Maximum	93	88	96	88	88	85	78	83	83	80	85	90	93	89	89	89	87	92	87	86	91	92	94	94	82	80	82	87	91	94	91	88.0
	Minimum	69	68	65	66	66	68	69	62	58	62	62	61	64	71	68	67	65	68	64	60	61	68	69	76	65	62	55	55	55	61	65	64.4
Earlington	Maximum	96	90	97	94	95	86	82	89	87	84	87	93	96	94	91	90	83	92	84	89	93	95	96	97	84	76	80	86	91	94	92	89.8
	Minimum	70	69	65	66	66	68	69	64	56	59	60	60	67	73	68	68	66	69	65	60	59	68	64	74	66	60	50	52	53	73	67	64.3
Greenville	Maximum	94	89	94	94	94	85	80	86	83	79	..	89	92	92	90	89	81	89	..	85	89	93	92	94	..	87	80	85	89	92	92	ᶜ88.5
	Minimum	69	68	65	65	65	66	68	62	57	60	..	59	63	71	67	68	65	64	..	62	59	68	67	73	..	61	50	52	54	60	62	ᶜ63.2
Hopkinsville	Maximum	95	90	96	97	95	84	87	90	88	83	88	95	97	95	93	92	81	93	82	89	93	92	97	98	86	79	85	90	95	97	95	90.9
	Minimum	68	68	67	66	67	70	69	62	57	60	59	60	68	70	68	69	70	69	65	64	64	70	66	71	68	65	52	57	54	61	62	64.7
Marion	Maximum	92	90	93	93	91	84	82	84	85	81	84	89	91	91	90	90	82	91	84	87	92	92	92	93	83	76	83	86	89	92	89	87.8
	Minimum	71	68	68	69	68	70	68	64	60	65	62	66	70	70	69	67	65	70	65	63	65	68	69	74	65	64	55	58	62	68	69	66.3
Mayfield §§	Maximum	89	90	98	77	91	84	84	84	85	88	85	88	92	91	90	92	88	90	..	88	92	94	91	95	84	73	81	87	91	92	92	ᵃ88.2
	Minimum	68	67	68	70	69	72	67	61	58	63	60	58	70	71	69	67	70	70	65	..	66	68	68	70	67	66	52	55	55	65	66	ᵃ65 5
Owensboro	Maximum	91	87	93	90	88	85	79	83	82	84	84	87	90	90	87	89	83	92	84	86	91	92	92	95	83	71	79	86	71	91	90	86.3
	Minimum	69	70	67	67	66	69	69	63	58	64	65	63	67	69	69	67	65	69	66	64	61	69	70	75	65	62	56	56	54	57	68	65.1
Paducah (Lone Oak)	Maximum	96	97	98	98	97	96	86	85	85	88	90	92	98	95	92	95	90	95	86	94	96	97	98	99	91	85	83	90	94	96	67	92.9
	Minimum	79	77	70	72	70	66	70	66	64	65	63	66	68	65	66	68	61	64	65	66	68	75	76	78	75	65	53	58	58	66	69	67.5
Princeton	Maximum	93	89	94	94	94	86	83	87	84	81	85	90	94	93	92	90	82	92	79	88	92	94	95	96	84	75	83	87	91	94	92	88.8
	Minimum	70	68	66	66	68	70	68	62	58	62	60	61	66	70	69	68	69	70	65	64	64	70	69	71	67	65	54	55	54	61	62	64.9
Russellville§§	Maximum	92	90	95	92	94	87	83	87	88	83	85	90	94	93	90	89	76	78	85	88	89	93	92	94	..	..	..	..	..	..	..	ᵍ88.6
	Minimum	68	69	66	68	65	69	71	62	57	59	57	62	65	70	67	69	68	68	62	65	63	70	67	72	61	..	..	..	..	..	..	ᶠ65.6
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	92	87	94	88	89	92	87	85	85	80	83	90	93	88	87	87	92	90	84	87	91	93	97	98	83	78	84	87	91	93	93	88.6
	Minimum	64	67	63	60	60	69	67	58	52	56	61	57	66	66	63	57	60	62	63	55	53	60	68	70	60	51	48	48	51	56	64	59.8
Bardstown	Maximum	90	85	92	87	88	88	82	86	84	81	82	88	91	85	86	89	88	91	82	84	89	92	95	96	82	82	83	85	91	93	92	87.4
	Minimum	67	73	66	65	61	69	64	58	56	58	64	59	63	70	67	63	65	65	67	59	57	63	69	72	67	57	55	51	54	59	64	62.8
Bowling Green	Maximum	98	94	97	96	95	90	85	90	86	80	88	92	96	94	91	91	83	98	95	82	87	86	94	95	98	80	87	91	93	96	95	91.1
	Minimum	65	67	67	67	67	64	71	61	59	60	63	63	63	69	67	66	69	69	65	62	62	68	68	68	65	59	63	56	56	60	60	64.2
Camp Knox	Maximum	93	86	93	84	88	84	77	84	82	75	79	86	91	90	86	86	88	90	81	84	90	91	95	95	81	73	81	84	90	91	91	86.1
	Minimum	68	70	70	64	61	68	64	61	57	59	64	61	64	70	70	63	63	68	66	59	57	64	70	72	68	57	54	55	55	63	68	63.6
Eubank	Maximum	87	87	91	84	87	84	81	82	81	75	78	84	86	84	85	86	81	80	82	82	85	87	90	90	80	73	78	84	87	90	84	83.7
	Minimum	67	67	64	60	58	68	68	55	58	56	62	59	60	67	65	64	64	68	67	60	53	60	65	72	67	55	54	50	51	53	60	61.2
Frankfort	Maximum	89	86	93	84	86	88	81	86	81	80	80	88	91	86	85	87	90	87	85	82	87	93	96	98	81	79	80	84	90	93	92	86.7
	Minimum	69	72	69	66	62	71	70	61	58	59	65	61	64	70	69	61	63	68	68	58	57	63	69	74	68	56	52	52	55	59	66	63.7
Franklin	Maximum	95	90	96	96	98	90	86	89	82	77	88	91	93	95	91	88	88	89	85	90	93	95	96	97	85	80	83	82	92	94	95	90.0
	Minimum	60	61	60	58	57	61	63	55	53	52	55	55	58	61	59	62	61	60	58	56	57	60	59	64	63	52	44	46	52	55	58	57.3
Greensburg	Maximum	87	83	91	84	88	83	81	84	81	78	78	87	88	89	83	85	87	84	82	82	84	88	90	93	89	78	80	84	83	91	90	85.0
	Minimum	66	67	67	61	57	66	69	56	57	54	62	67	59	66	65	66	64	65	64	64	56	60	64	68	67	55	47	47	56	52	58	61.0
Irvington	Maximum	90	86	91	85	88	85	79	83	80	79	80	86	90	89	89	85	86	87	81	82	87	91	93	95	79	74	79	82	86	89	89	85.3
	Minimum	69	70	67	65	62	71	70	63	57	62	64	62	67	72	69	66	64	66	67	66	61	66	71	69	67	58	56	57	56	60	68	64.8
Junction City	Maximum	90	82	92	89	87	83	83	84	84	82	84	87	88	85	87	88	88	82	81	84	88	90	93	93	90	80	80	85	90	92	93	86.6
	Minimum	66	69	65	63	58	68	69	56	57	55	53	58	58	68	66	61	62	64	59	56	53	59	66	72	69	60	50	49	50	54	61	60.5
Leitchfield	Maximum	90	86	93	87	89	85	79	85	83	77	83	86	88	88	87	87	80	88	82	84	88	91	93	95	80	73	81	85	88	91	89	85.8
	Minimum	68	71	65	65	62	67	62	60	57	61	63	60	64	68	67	67	64	67	65	61	58	65	68	70	67	58	55	58	56	60	63	63.3
Lexington	Maximum	88	80	90	81	86	83	78	82	79	77	77	84	87	83	83	84	86	82	77	79	84	88	93	93	76	73	77	83	88	90	89	83.2
	Minimum	69	69	70	65	60	68	66	62	62	65	63	66	70	67	68	69	69	68	64	62	64	69	71	70	59	53	56	62	70	67	67	65.5
Louisville	Maximum	91	86	93	84	88	86	77	83	84	78	80	87	88	83	84	85	88	88	80	85	90	90	94	95	80	76	81	85	88	90	89	85.6
	Minimum	70	71	70	66	64	69	68	65	63	66	65	66	69	70	69	66	68	69	65	64	64	70	73	74	66	58	57	61	61	70	73	66.8
Do. (Cherokee Park)	Maximum	87	86	90	87	84	84	82	81	79	76	77	83	85	79	81	83	84	85	84	80	83	87	92	93	78	77	78	81	84	88	87	83.4
	Minimum	67	72	67	64	61	70	69	63	59	61	63	61	65	69	69	62	64	67	65	59	59	64	71	73	66	54	54	56	56	63	71	64.0
St. John	Maximum	93	93	95	89	89	86	83	87	83	80	82	89	92	90	90	89	89	90	81	84	84	93	96	98	80	73	80	86	89	92	92	87.6
	Minimum	67	66	63	63	61	68	68	57	54	57	61	56	62	70	66	65	62	64	64	62	64	76	67	75	66	55	52	53	53	57	63	62.5
Scott	Maximum	92	83	89	80	80	86	74	80	82	74	79	85	88	86	84	85	85	86	81	83	89	89	95	91	78	74	80	84	89	92	87	84.2
	Minimum	66	67	68	61	57	66	67	60	57	59	63	60	66	67	63	60	57	66	60	55	56	62	70	76	63	52	52	51	55	65	65	61.7
Shelbyville	Maximum	89	88	88	89	81	84	80	83	82	78	79	89	92	85	83	84	88	88	81	80	83	93	98	89	84	78	83	88	93	95	94	86.1
	Minimum	64	69	63	61	58	64	64	56	53	55	61	57	60	66	65	57	60	64	63	54	54	60	61	67	61	50	48	49	54	56	61	59.2
Taylorsville	Maximum	91	89	93	85	85	86	79	86	82	77	81	87	89	80	84	85	85	91	83	85	88	91	96	96	81	76	81	86	89	92	92	86.2
	Minimum	65	71	62	62	60	69	69	57	55	57	63	57	61	67	67	61	62	65	66	56	54	60	67	72	67	54	48	48	51	54	60	60.9
Williamstown	Maximum	90	86	90	82	81	86	79	82	82	78	80	87	89	87	88	88	87	87	86	83	87	89	95	95	79	75	80	84	90	92	91	85.6
	Minimum	64	71	68	61	59	66	60	59	55	60	60	64	64	67	66	59	60	61	64	54	58	61	64	74	69	62	50	52	55	58	77	62.0
Eastern Division.																																	
Ages	Maximum	87	82	91	87	89	85	84	85	85	86	81	85	93	90	88	85	85	81	84	87	89	89	89	92	89	79	84	87	89	90	91	86.7
	Minimum	68	67	67	62	60	63	69	64	63	56	64	61	63	63	66	69	66	66	68	64	63	64	63	66	64	70	70	63	67	76	73	65.4
Ashland	Maximum	86	83	89	82	80	97	81	83	81	79	81	87	89	86	84	85	86	87	81	82	85	89	94	88	77	78	77	83	87	91	91	84.5
	Minimum	69	69	67	62	56	63	69	61	60	58	66	63	65	69	63	57	66	63	66	56	57	60	67	69	64	55	52	53	57	59	68	62.2
Beattyville	Maximum	92	86	94	93	89	91	85	88	85	79	82	89	91	88	90	87	91	82	84	88	89	93	95	96	82	77	83	86	93	97	96	88.4
	Minimum	69	66	63	62	56	63	70	61	61	54	64	62	64	65	65	62	64	64	69	56	56	59	64	70	67	51	49	51	53	55	60	61.1
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	90	81	92	82	82	86	81	84	82	79	77	87	90	90	85	87	84	88	80	81	84	91	95	97	78	74	85	84	89	92	92	85.5
	Minimum	67	70	68	62	58	66	69	61	60	60	65	61	64	64	69	59	62	66	64	59	60	62	63	76	65	52	54	55	59	60	65	62.7
Middlesboro	Maximum	87	80	90	87	87	86	86	86	86	83	83	87	90	91	87	87	80	81	85	85	86	88	91	93	86	79	81	83	88	90	91	86.1
	Minimum	69	66	66	63	59	65	70	59	63	56	63	62	62	64	64	64	62	68	67	65	64	59	64	69	69	55	54	53	53	61	60	62.5
Mount Sterling	Maximum	90	83	93	83	83	91	82	85	85	79	79	86	89	87	85	86	88	85	78	80	84	90	93	94	77	77	78	82	89	93	93	85.4
	Minimum	67	68	66	65	58	66	69	60	58	56	62	61	62	69	69	59	62	65	66	55	56	59	68	73	65	52	51	50	52	60	64	61.7
Richmond	Maximum	87	84	90	87	87	85	80	83	83	78	75	86	88	83	85	87	86	80	80	83	80	90	92	92	82	78	83	86	89	92	90	84.9
	Minimum	70	68	69	66	61	70	69	62	61	60	64	64	67	67	68	66	66	69	69	60	59	64	70	74	68	54	53	57	58	65	68	64.7
Williamsburg	Maximum	89	82	93	89	90	87	86	86	85	85	81	86	89	90	89	88	79	83	83	87	88	91	93	94	84	79	83	87	89	92	92	87.1
	Minimum	70	67	68	63	59	70	70	61	62	56	66	63	64	67	67	68	63	68	70	65	62	59	65	75	69	56	52	53	56	60	62	63.7

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

ᵃ ᵇ ᶜ etc. indicate respectively 1, 2, 3 etc., days missing from record.


Edmonton
Battleford
NO RAIN
Scale of Shades
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 8 inches
Over 8 inches
H F

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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

AUGUST, 1920.

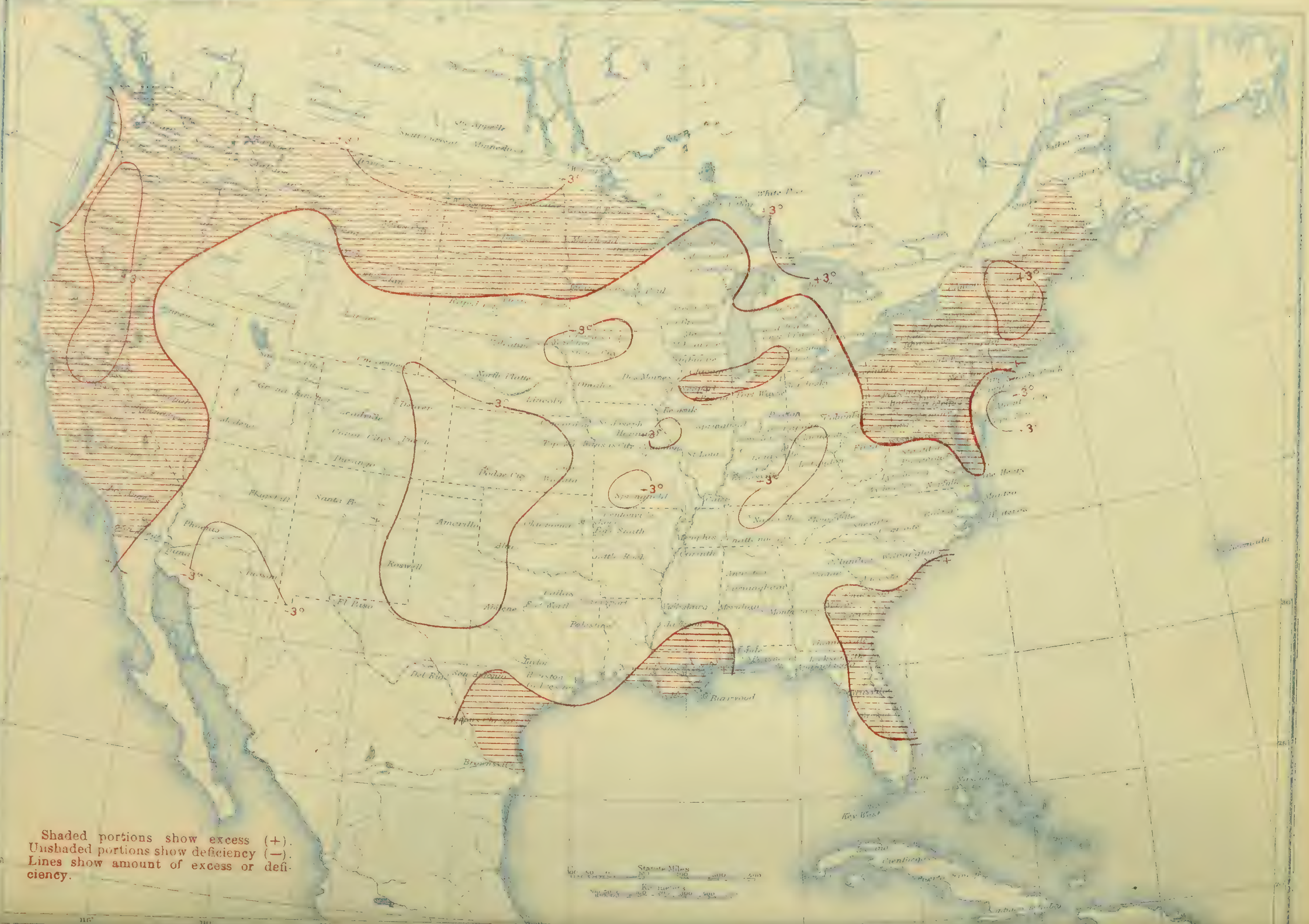
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
OCTOBER 18, 1920.

Departure of the Mean Temperature from the Normal, August, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (—).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

VOL. XXV. LOUISVILLE, KY., AUGUST, 1920. No. 8

GENERAL SUMMARY.

Low temperature and frequent rains characterized the weather during most of the month. In the second decade mean daily temperatures were near normal, but during the rest of the month they were generally below normal. At the beginning of the month serious drought prevailed in many districts. Pastures were short, gardens had about ceased producing, and early tobacco and corn had begun to "fire" in the hilly sections. The larger part of the corn and tobacco crop was late, and except for retarded growth, had escaped serious injury from the drought. The general and heavy rains of the 6-8th effectually broke the drought, but showers continued almost daily during the last three weeks and the soil became thoroughly saturated. Because of the excellent state of cultivation, and the large root systems developed during the dry weather, rapid and vigorous growth of corn and tobacco followed the rains; although the unseasonably low temperature and lack of sunshine were not conducive to best results. Pastures took on the luxuriant appearance of spring, and late potatoes presented the best prospect in many years. Cutting and housing tobacco began generally in the burley district; but the frequent showers and moist atmosphere were decidedly unfavorable for curing, and some damage resulted from "house-burn." It is believed that the wet weather promoted the spread of the tobacco rust, which became serious in limited areas in the burley district. Picking and marketing fruit and tomatoes were hindered by the rains.

TEMPERATURE.

The average temperature for the month, 39 stations reporting, was 73.4°, which is 2.3° below normal. The temperature reached 90° on only a few days; while at several stations this temperature was not reached during the month. It is remarkable that the temperature has averaged below normal for every month of the present growing season, April to August, inclusive.

Low minimum temperatures, ranging from 43° to 55°, occurred in the periods 2-3d and 23d-26th. Extremes at the various stations were 98° on the 6th at Hopkinsville, and 43° on the 2d at Anchorage and on the 3d at Franklin.

PRECIPITATION.

The average precipitation for the State, based on the reports of 56 station, was 5.80 inches, which is 2.24 inches above normal. The heaviest rainfall occurred over the blue grass district, and the south-central and southeastern counties, ranging in amount from six to nine inches and reaching twice the normal for August at several stations. The burley tobacco district was almost entirely within the area of heavy rainfall, and that portion of the western "dark" district lying in the upper and middle Green River basin was also included. In the extreme western counties, the northeastern corner of the State, and along the Ohio from Jefferson County westward, monthly totals were near normal. Showers occurred on the 1st, in the periods 6-16th, 21st-22d, and 27th-31st; heavy rains were quite general in the periods 7-8th and 13-15th, but heavy local rains also occurred on several other dates. Amounts at the various stations ranged between 1.79 inches at Oliver, Greenup County, and 10.96 inches at Woodbury, Butler County.

MISCELLANEOUS

August 7.—Crops and fruits were damaged by hail in Jefferson County. Damage to tobacco by hail in Nicholas County was estimated at $250,000, many crops being a complete loss. Tobacco was also damaged seriously by hail in Boyle, Mercer, Garrard, McCracken and Marshall counties. Two men were injured by lightning near Maysville, one dying a few days later. Several head of hogs and sheep were killed by lightning near Georgetown.

August 9.—A residence was damaged by lightning at Hopkinsville.

August 11. - Much damage resulted from washouts on creeks near Owingsville.

August 13.—A barn was destroyed by lightning near Marion.

(Continued on next page.)

PRESSURE AND WIND.

Stations.	Atmospheric Pressure. (In inches reduced to sea level.)					Wind				
								Max. Velocity.*		
	Average.	Highest.	Date.	Lowest.	Date.	Total movement.	Av. hourly velocity.	Miles per hour.	Direction.	Date.
Cairo .... Ill.	30.01	30.21	24	29.83	28	4396	5.9	34	n.	31
Cincinnati ...... Ohio	30.04	30.25	18	29.84	21	3915	5.3	25	se.	7
Evansville....... Ind.	30.04	30.22	23	29.86	29	5685	7.6	46	w.	31
Lexington ....Ky.	30.04	30.23	18	29.90	21	7188	9.7	35	n.w.	12
Louisville ....Ky.	30.05	30.24	18	29.84	21	6176	8.3	39	w.	21

*For any five minute period.

HUMIDITY AND SUNSHINE.

Stations.	Rel. Humidity.			Sunshine.				
							Number of days with	
	7 a. m.	Noon.	7 p. m.	Total hours of sunshine.	No. of hours possible.	Percentage of possible.	80 per cent or more.	20 per cent or less.
Cairo ....Ill.	88	64	68	321.9	420.0	77	17	2
Cincinnati ....Ohio.	88	53	71	245.7	423.5	58	10	3
Evansville..................Ind.	82	54	65	280.5	421.7	66	10	1
Lexington ....Ky.	85	65	......	187.7	421.7	45	5	7
Louisville ....Ky.	84	60	69	258.9	421.7	61	10	3

COMPARATIVE DATA FOR AUGUST.

Year	Temperature.				Precipitation		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain
1889	70.6	−5.1	100	43	1.23	−2.33	
1890	73.2	−2.5	101	44	6.16	+2.60	
1891	72.9	−2.8	105	43	5.82	+2.26	
1892	75.4	−0.3	96	45	3.13	−0.43	
1893	74.8	−0.9	99	48	1.72	−1.84	
1894	77.1	+1.4	105	41	3.02	−0.54	
1895	76.6	+0.9	102	49	2.15	−1.41	6
1896	77.1	+1.4	105	41	2.83	−0.73	5
1897	75.2	−0.5	101	49	2.33	−1.23	6
1898	76.7	+1.0	100	55	3.83	+0.27	7
1899	78.1	+2.4	102	51	3.09	−0.47	6
1900	80.4	+4.7	104	52	2.74	−0.82	6
1901	75.5	−0.2	101	50	5.12	+1.56	12
1902	75.6	−0.1	103	45	2.48	−1.08	7
1903	75.5	−0.2	100	49	3.27	−0.29	8
1904	75.2	−0.5	100	45	2.64	−0.92	8
1905	75.7	0.0	99	42	3.82	+0.26	9
1906	77.4	+1.7	99	45	4.37	+0.81	10
1907	74.8	−0.9	99	48	4.27	+0.71	10
1908	76.3	+0.6	104	49	2.79	−0.77	6
1909	76.9	+1.2	104	45	2.60	−0.96	7
1910	74.0	−1.7	100	46	2.72	−0.84	6
1911	76.2	+0.5	106	45	4.03	+0.47	10
1912	73.7	−2.0	98	43	4.71	+1.15	13
1913	78.0	+2.3	108	44	2.81	−0.75	7
1914	76.0	+0.3	100	49	5.94	+2.38	12
1915	71.3	−4.4	100	42	6.29	+2.73	14
1916	77.0	+1.3	101	47	4.25	+0.69	9
1917	73.9	−1.8	100	42	3.49	−0.07	8
1918	80.2	+4.5	111	50	3.18	−0.38	7
1919	75.0	−0.7	104	47	3.49	−0.07	8
1920	73.4	−2.3	98	43	5.80	+2.24	[illegible]

Climatological data for August, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	74.6	− 1.6	95	6	48	2	35	5.45	+2.11	1.70	0	10	18	4	9	w.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	74.4	− 2.4	92	6	53	25	32	2.59	−0.55	0.55	0	11	11	9	11	s.	E. W. Horr.
Calhoun	McLean	437	16	74.0	− 3.5	95	6	51	2‡	34	4.57	+1.21	0.71	0	12	10	17	4	sw.	W. A. Taylor.
Earlington	Hopkins	420	29	74.3	− 2.8	95	6	47	3	37	3.68	+0.53	1.51	0	11	18	2	11	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	$^{c}73.9$	......	95^{c}	6	50^{c}	3†	36	5.50	......	2.00	0	10	10^{c}	18^{c}	0^{c}	w.	C. R. Lovell.
Henderson	Henderson	327	12	....	......	......	....	......	......	......	3.20	+0.90	1.40	0	5	....	....	....	......	W. W. Shelby.
Hopkinsville	Christian	524	23	76.2	− 1.6	98	6	51	3†	36	5.04	+1.99	1.48	0	10	8	0	23	s.	W. E. Graves.
Marion	Crittenden	571	21	74.4	− 3.7	95	6	53	2†	31	3.46	+0.67	0.73	0	9	10	13	8	s.	B. C. Paris.
Mayfield	Graves	364	10	$^{a}74.4$	− 2.9	94^{a}	6†	48^{a}	24	37	3.04	−0.20	1.00	0	8	6^{b}	17^{b}	6^{b}	s.	J. N. Davis.
Owensboro	Daviess	479	23	74.6	− 1.8	93	6	54	25	29	2.95	−0.64	0.82	0	10	12	2	17	s.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	77.2	......	96	6	60	23	34	4.64	......	2.14	0	10	20	4	7	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	....	......	......	....	......	......	......	6.12	+2.84	1.80	0	8	....	....	....	......	Frank L. Brown.
Princeton	Caldwell	529	10	$^{b}75.0$	− 3.6	94^{b}	6	52^{b}	24†	38^{b}	3.67	+0.15	0.93	0	11	10	11	10	n.	Dr. W. L. Cash.
Russellville	Logan	590	6	....	......	......	....	......	......	......	....	......	......	......	....	....	....	....	......	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	....	......	......	....	......	......	......	6.88	+2.55	1.70	0	9	5	14	12	sw.	Frank Hicks.
Anchorage	Jefferson	700	19	72.2	− 2.5	93	6	43	2	39	8.88	+4.99	2.18	0	14	13	10	8	sw.	C. E. Barret.
Bardstown	Nelson	637	23	73.4	− 2.8	93	5	51	2†	31	5.99	+2.38	1.85	0	10	18	4	9	e.	Chas. M. Talbott.
Bowling Green	Warren	500	29	74.5	− 3.8	93	6	52	2†	37	4.08	+0.56	1.50	0	10	11	9	11	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	....	......	......	....	......	......	......	7.18	......	1.57	0	16	....	....	....	......	James H. Young.
Burnside	Pulaski	773	27	....	......	......	....	......	......	......	5.92	+1.76	1.52	0	14	....	....	....	......	F. E. Bradshaw.
Camp Knox	Hardin	763	0	73.0	......	91	6	50	3†	32	5.92	......	1.98	0	20	6	9	16	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	....	......	......	....	......	......	......	5.58	+2.76	2.07	0	12	....	....	....	......	Charlie Oliver.
Cloverport	Breckenridge	375	6	....	......	......	....	......	......	......	4.48	......	1.04	0	13	....	....	....	......	W. A. Cockerill.
Eubank	Pulaski	1177	25	72.0	− 1.8	87	4†	49	24†	31	7.63	+3.68	2.20	0	15	5	12	14	e.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	73.4	− 1.6	94	6	50	2	29	4.75	+1.07	1.95	0	11	14	2	15	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	72.2	− 5.0	96	5†	43	3	43	9.45	+6.15	2.30	0	15	15	12	4	s.	B. V. Hunt.
Greensburg	Green	581	27	71.6	− 4.0	88	5	47	3	38	8.19	+4.29	1.78	0	18	6	5	20	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	....	......	......	....	......	......	......	8.03	+4.16	1.54	0	16	....	....	....	......	Miss Lulu Wood.
Irvington	Breckenridge	646	22	73.6	− 2.4	90	6	52	24†	26	3.90	+0.30	0.80	0	11	14	5	12	sw.	W. J. Piggott.
Junction City	Boyle	985	26	72.2	− 2.1	90	5†	48	2‡	35	5.99	+2.86	1.02	0	22	10	13	8	s.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	73.3	− 2.1	92	6	52	2†	32	4.94	+1.27	1.03	0	13	11	14	6	sw.	John E. Stone.
Lexington	Fayette	989	32	72.2	− 2.4	88	5	53	23	26	6.71	+3.14	1.42	0	15	6	9	16	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	73.6	− 2.9	91	6	54	23	28	4.78	+1.27	2.28	0	12	8	13	10	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	72.0	− 3.3	87	6	52	3†	27	5.57	+1.42	1.51	0	11	9	13	9	sw.	Wm. I. Hunt.
St. John	Hardin	777	23	73.0	− 1.7	94	5	49	2	33	7.04	+3.41	2.95	0	13	15	4	12	......	Sisters of Loretto.
Scott [¶]	Kenton	900	22	71.5	− 3.6	90	5	43	2	33	6.49	+2.95	2.03	0	13	6	17	8	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	72.3	− 3.2	94	5	45	2	35	5.52	+2.16	2.13	0	13	11	5	15	ne.	F. A. Miller.
Taylorsville	Spencer	489	17	71.6	− 2.8	89	4†	44	2	36	5.31	+1.59	1.35	0	15	10	4	17	s.	E. D. Bourne.
Williamstown	Grant	943	17	71.8	− 2.0	90	5	49	2†	26	8.46	+4.32	1.50	0	14	10	11	10	......	Mrs. E. S. Humlong
Woodbury	Butler	533	2	....	......	......	....	......	......	......	10.96	......	3.16	0	13	....	....	....	......	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	73.7	......	91	30	52	3	29	8.52	......	1.70	0	17	2	11	18	s.	S. A. Driver.
Ashland	Boyd	531	13	74.0	......	90	5	50	3	30	2.79	......	0.55	0	10	5	5	21	w.	Forester Farley.
Beattyville	Lee	650	16	74.3	− 0.9	95	20	48	3	36	4.83	+0.20	1.29	0	14	8	11	12	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	$^{j}72.8$	− 1.8	90^{j}	20	49^{j}	24	31^{j}	4.21	−0.73	1.43	0	6	8^{j}	9	4^{j}	n.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	....	......	......	....	......	......	......	7.05	.....	1.55	0	14	....	....	....	......	P. H. Kehoe.
Falmouth	Pendleton	600	31	....	......	......	....	......	......	....	9.67	+6.14	3.94	0	13	13	5	13	e.	J. V. Oldham.
Farmers	Rowan	668	12	....	......	......	....	......	......	......	5.75	+1.18	2.00	0	9	16	10	5	w.	Miss Catherine Evans.
Jackson	Breathitt	776	8	....	......	......	....	......	......	......	....	......	.....	......	....	....	....	....	......	Jas. L. McCoy.
London	Laurel	1190	5	....	......	......	....	......	......	......	4.62	......	1.50	0	12	....	....	....	......	C. R. Lee.
Louisa	Lawrence	584	16	....	......	......	....	......	......	......	2.80	−1.03	0.95	0	10	....	....	....	....	Miss Carrie S. Adams.
Maysville	Mason	524	22	72.9	− 2.8	89	5	51	2	28	6.95	+2.97	2.00	0	13	6	12	13	e.	Harry M. Robinson.
Middlesboro	Bell	1128	21	72.2	− 2.2	88	30†	50	3	34	8.00	+4.47	1.45	0	17	8	22	1	......	B. H. Perkins.
Mount Sterling	Montgomery	930	30	72.4	− 1.7	91	7	47	2	31	9.47	+5.50	1.91	0	15	12	4	15	w.	W. R. McKee.
Oliver	Greenup	540	0	....	......	......	....	......	......	....	1.79	......	0.54	0	6	....	....	....	......	W. C. Hash.
Pikeville	Pike	634	11	....	......	......	....	......	......	......	5.24	+1.10	1.32	0	15	....	....	....	......	I. M. Williams.
Richmond	Madison	926	25	73.6	− 2.0	90	20	51	3	31	6.23	+3.03	1.20	0	17	8	7	16	......	J. W. Crooke.
Vanceburg	Lewis	525	3	....	......	......	....	......	......	......	5.31	......	1.36	0	10	....	....	....	......	Samuel Johnson.
Williamsburg	Whitley	939	22	72.6	− 3.5	91	30†	51	3	34	8.89	+4.37	1.68	0	16	5	16	10	s.	D. B. Bradley.
State averages and extremes				73.4	......	98	6	43	2†	43	5.80	......	3.94	0	13	10	10	11	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †¹ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

[¶] Post-office address, Covington, Ky.

August 18.—Floods in headwater streams damaged roads, bridges, and buildings and crops on low ground, in the eastern part of Letcher County.

August 27.—Carlisle was flooded by an excessive rain with property loss estimated at $350,000. Houses, about 20 bridges near the city, and a large section of the L. & N. tracks were washed away. A residence in the city was set on fire by lightning. Hail near Harrodsburg damaged tobacco to the extent of several thousand dollars. In Grant County about 100 acres of tobacco were badly injured by hail, the damage being estimated at $10,000.

August 29.—Much damage was caused by excessive rains in Mason and adjoining counties. Bridges and crops on lowlands along creeks were washed away. Portions of the tracks of the B. & O. and L. & N. railroads in Mason County were washed out.

August 30.—A heavy rainstorm damaged tobacco near Harrodsburg.

Rivers.—Except for floods in small headwater streams, due to the excessive local rains, the rivers of the State were at moderate stages during the month.

Daily Precipitation for August, 1920

Stations	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																
Beaver Dam G							.17	.39					[illegible]		1.70							1.30										
Blandville M									[illegible]			.04	.05																			
Calhoun G	.03						.65			.20				.71																.45		
Earlington‖‡ G	.15				.13			[illegible]		.04						.02												T				
Greenville G							1.04						2.00								.34	.20						[illegible]				
Henderson‖ O								.05							1.40							.20										
Hopkinsville C	T	.20		[illegible]	.02		T.	1.29	T.	T	1.48		.07	.28								.34						T				5.64
Marion O							.73			.23	.50		.15	.20	.19																	
Mayfield‖ M	.10							1.00			.12		.15		.73																	
Owensboro‖ O	.02					T		.71	T.			T.	.82		.30						T.	.40					T.	.06				
Paducah (Lone Oak) O							.04	.40		.18				.40	2.14						.64							.11		.36		
Paducah O		T.						1.80					.10		.80	1.20					.20											
Princeton G	.01						.17	.48		.93	T.		.30	.09	.81	T.					.53							T.	.06		.09	3.47
Russellville‖ G																																
Central Division																																
Alpha C	T.					T.		.64	1.30	T.		.15	.74	.55	.78						.60	T.					.42	T.		1.70		6.88
Anchorage O					.22	[illegible]	1.32	.26	.14			.05	.78	2.18	.42					T.	1.76	.10								.39		8.88
Bardstown‖ S							.60	.80	.25	.65	.20		[illegible]	.46	.21							1.85								.60		[illegible]
Bowling Green‖ G								1.50		T.	.21		.33	.23	.83	.05					[illegible]	.48										[illegible]
Brownsville‖ G		.18				.03	.05	.61	.82	.52	1.23	.08	1.57	.05	.48							.61					.03		.29		.20	7.18
Burnside‖ C	.34	.16		T.			.30	.04	.86	.75	T.	.07	.12	1.52	.72	.20	T.				T.	.58	T.				.06			.20		5.92
Camp Knox¶ O	.03			.02			.26	1.98	.36	.65	.03	.01	.87	.15	.15	.27	.02				.24	.13	.01				.08		.53	.02	.11	5.92
Carrollton‖ (Lock No. 1) O	.45							.93	.07	.17		.32	2.07	.10		.60						.51						[illegible]		.28	.03	5.58
Cloverport‖ O	.03					.02	.20	.72	.03	T			1.04	.01	.42	.51					T.	.77							.02	.67	.04	4.48
Eubank C	.32						.35	.40	.43	.89	.05	.36	.50	.36	2.20	.66			.06			.75									.30	7.63
Frankfort‖ K	.36							.42	.12	.57			[illegible]	.34		.10						1.95					.02		.06	.26		[illegible]
Franklin G						.08	.03	2.00	.15	.09	.62		.42	2.30	1.10	.04					.45	.96						[illegible]	.25			[illegible]
Greensburg‖ G	.65	.32				.10		1.78	.17	.52	.01	.06	.60	.69	1.02	.24	.08					1.36	T.				T.	.18	.09	[illegible]	.28	8.19
High Bridge‖ K	.05					.05	.04	1.54	.42	.60	.37		.26	.14		1.15	.90					1.45					.08	.28		.44	.26	8.03
Irvington O	T.						.80	.50			T.	.52	.58	.17	.02						[illegible]	T.					.19		.64	.07		[illegible]
Junction City K	.38				.08	.75	.07	.38	.78	.22		.05	.58	.27	.38	.01	.02			.48	.03	1.02	.01	.01			.07	.01	.35		.04	5.99
Leitchfield G				T.	T.	.03	.58	.05	.07	.15			.84	.89		T					1.03						.16	.45	.06			[illegible]
Lexington *** K	.07			T.		T.	1.37	.10	[illegible]	[illegible]	.01	.43	.19	.01	.23	.01			.63		1.35	T.					.86		.60	T.		[illegible]
LOUISVILLE*** O					T	.01	2.27	T.	.06		T.	.13	.42	T.	.11						.51						.01	T	.50	.74		[illegible]
Do (Cherokee Park) O							.87	1.51	.07			.32	.50		.16				T.			[illegible]					.01		.77	.53	.02	[illegible]
St. John‖ S	T.			T.			.30	.94	2.95	.12	.02	T.	.77	[illegible]	.12	.04						.61					.42			.62	.10	7.04
Scott L	.30						2.03	.03	.40	.52		1.14	T		.80	.06					T	.50					.05	[illegible]	[illegible]	.30	T.	6.49
Shelbyville‖ S	.42						.05	2.13	.05	.15			.23	.25	.03	.01						1.89	.02							.25		[illegible]
Taylorsville S	.02				.33	.47	1.35	.31	.46			.03	.35	.04	.07	T.					.53	.01					T.		.29	1.02	.03	5.31
Williamstown‖ L	.45							1.23	.27	[illegible]	1.50	.02	.57	.84	.10	.21						1.24								.87		8.46
Woodbury‖ G								.81	.15	.03	3.16		.58		1.77	.03					.02	1.04						1.65	1.28	.06		10.96
Eastern Division.																																
Ages K	1.50						1.70	.16	.42	1.22	T.	.23	.37	.39	.45	1.00	.04	.01		T.	.40	.38	.05				.14		.06			8.52
Ashland O	.55							.32	.18	.24	.15	.48				.18				.48									.04			[illegible]
Beattyville‖ K	.21						.64	.01	.38	.37		.16	.26	.09	.06	.13						1.29						[illegible]		.07	T	4.83
Berea K						T.	T	.94	1.15					.40					.22	T.		1.43						.07				[illegible]
Cynthiana‖ L	.25			T.	T.			[illegible]	1.00	.15	.10	.05	1.15	.85	.05		T.		T.			1.10				T	.05	.15	.50	.10	T.	7.05
Falmouth‖ L	.18							.54	.43	.65	3.94		.22	.41		.08						.97					.04	.12	.80	1.29		9.67
Farmers‖ L	.15						.05	2.00		.95	.50	T.	.20			.30	T.					1.40					T.	.20				[illegible]
Jackson‖ K																																
London‖ C							.20		.25	1.50	.10	.15	.25	.50	.40	.25	.20					T.	.10							T.	.50	4.62
Louisa‖ B	.37	.18							.35	.19	.23		.14			.95	.08					.11								.20		2.80
Maysville‖ O	.20					T.		.42	.35	.17	2.00	.16	.15	.28	T	.08						.60					.15	[illegible]	.15	1.10		6.95
Middlesboro C	.52					.07	.68	.07	1.06	.38	.24	.45	.45	.64	.55	.12	.32				1.45	.32					.60		.08			8.00
Mount Sterling‖ L	.30	T.						.65	.40	.55	.76	.20	1.91	.07	T.	.20	.04					1.85	T.				.11	1.91	T.	.50	.02	9.47
Oliver‖ O										.53	.54	.10	.32			.12											.12					[illegible]
Pikeville‖ B	.12	.62					1.32	.12	.74	.52	.18		.18	.32	.26	.18			.08	.12		.32	.16									[illegible]
Richmond K		.20			.53	.09	T.	.80	.17	.77	.08	.57	.41	.34	.09	.36	.02				T.	1.20	T.				.15	.10		.35	T	6.23
Vanceburg‖ O	[illegible]							.87		.33	.08	.10				.23				.30		1.36						.09		1.15		5.31
Williamsburg‖ C		.31				1.68	.18		.28	1.46	.06	.09	.46	.70	.72	.37	.45	T		.09		1.57	.11				.36			T.		8.89

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

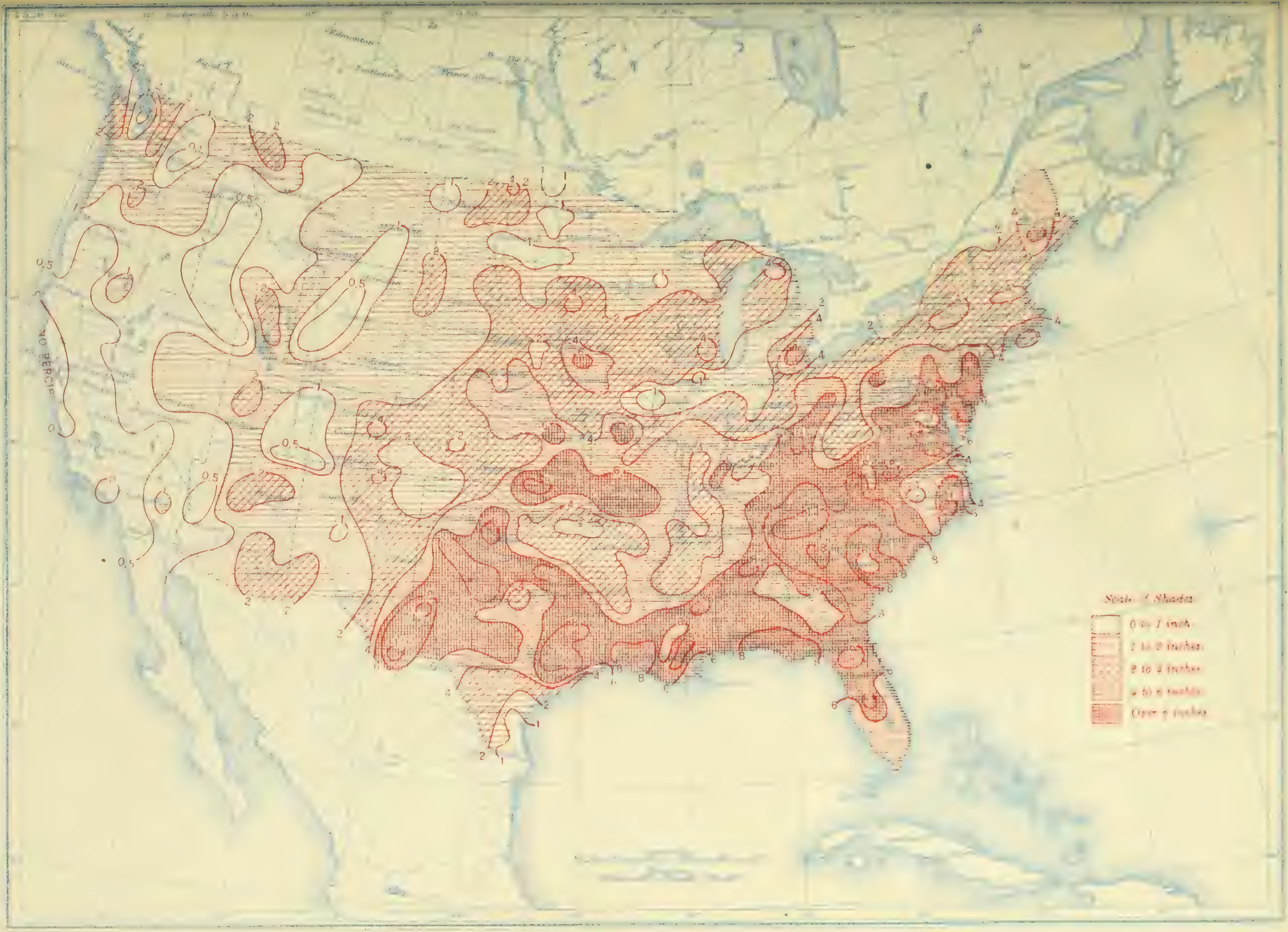
¶ Precipitation for 24 hours ending at 3 p. m.

Daily temperatures for August, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	85	83	85	92	94	95	92	87	89	82	87	89	89	88	87	88	90	90	93	90	90	75	77	81	83	82	85	89	80	90	90	87.0
	Minimum	65	48	50	57	64	67	65	56	68	70	68	70	67	69	68	66	61	62	64	68	64	64	55	50	51	55	62	60	58	67	65	62.1
Blandville	Maximum	85	80	83	90	90	92	89	83	86	84	89	86	85	81	83	82	84	86	87	88	82	74	75	77	80	75	83	85	84	87	88	84.0
	Minimum	64	56	55	58	66	67	69	68	66	69	68	69	69	69	69	66	65	66	67	69	67	64	55	54	53	65	63	64	69	68	71	64.8
Calhoun	Maximum	83	79	83	91	92	95	88	83	88	83	86	87	86	82	81	84	87	88	91	89	89	75	76	81	85	78	84	83	84	84	84	84.8
	Minimum	67	51	52	57	65	67	66	66	68	70	69	68	69	70	69	65	61	63	64	67	71	63	56	51	53	56	61	60	66	66	64	63.3
Earlington	Maximum	88	80	84	89	92	95	94	81	88	84	90	89	87	80	82	85	88	90	89	90	89	76	76	79	82	80	82	88	83	90	92	85.9
	Minimum	66	49	47	54	63	68	67	65	68	69	68	69	69	70	69	63	60	62	63	67	71	63	55	49	51	55	62	58	69	68	68	62.7
Greenville	Maximum	85	79	82	92	93	95	93	84	87	84	87	86	86	80	89	89	87	91	..	..	89	85	74	79	81	81	81	89	..	89	89	'''85.9
	Minimum	65	52	50	56	62	67	65	65	67	69	67	68	68	68	64	60	62	64	..	..	71	62	56	50	50	64	61	59	..	66	66	'''61.9
Hopkinsville	Maximum	88	83	87	93	96	98	95	85	89	83	89	89	87	87	88	89	91	92	94	93	93	74	80	83	87	85	90	90	83	91	92	88.5
	Minimum	66	52	51	59	64	64	68	63	67	68	69	71	70	70	72	65	70	64	65	68	71	64	58	52	51	56	65	63	66	66	67	64.0
Marion	Maximum	82	80	84	90	91	95	91	83	86	85	86	85	82	81	79	84	87	88	90	87	80	74	76	79	83	76	83	86	83	85	87	84.1
	Minimum	66	53	53	59	68	70	67	66	70	68	67	68	69	71	69	66	65	66	68	71	68	62	54	54	56	62	61	64	69	67	68	64.7
Mayfield §§	Maximum	84	80	81	90	92	94	94	82	88	84	85	86	85	84	86	83	87	88	91	90	89	78	78	81	..	84	86	85	83	86	90	'85.8
	Minimum	62	55	53	58	63	66	67	64	65	68	68	67	69	70	69	65	62	62	64	69	71	63	55	48	50	..	61	60	64	70	70	'63.1
Owensboro	Maximum	83	80	82	89	90	93	89	82	85	86	86	86	83	84	80	82	86	88	88	88	84	74	75	79	80	81	81	85	85	86	86	84.1
	Minimum	67	55	57	60	70	68	67	68	68	68	69	68	69	70	70	66	63	65	67	68	72	68	57	55	54	66	66	57	65	67	66	65.0
Paducah (Lone Oak)	Maximum	91	85	88	90	92	96	94	88	90	91	90	89	87	86	85	85	88	87	89	91	92	80	77	78	81	83	86	91	90	92	90	87.8
	Minimum	67	62	65	67	70	73	67	62	63	64	62	65	69	70	69	63	70	70	71	72	63	61	60	62	63	64	67	71	70	72	68	66.5
Princeton	Maximum	83	80	92	..	..	94	93	82	88	84	89	88	84	82	84	86	88	89	91	90	88	75	76	80	84	82	85	90	83	90	90	''85.9
	Minimum	66	54	54	..	..	69	67	66	67	67	69	70	70	70	70	65	63	63	65	68	71	64	56	52	52	58	62	61	69	65	66	'64.1
Russellville§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	84	80	84	92	92	93	90	79	84	86	88	86	84	87	81	86	88	86	91	90	85	71	75	79	82	82	85	85	77	75	85	84.3
	Minimum	65	43	45	58	61	64	65	64	66	66	66	67	65	66	66	62	60	61	62	62	68	61	48	48	49	52	55	57	66	60	61	60.0
Bardstown	Maximum	82	80	84	89	93	90	87	75	81	82	86	85	84	86	82	86	87	87	88	88	82	74	73	77	80	82	83	84	76	87	86	83.4
	Minimum	63	51	53	59	63	66	65	66	69	68	69	69	68	69	71	72	63	64	64	69	69	64	53	51	51	54	64	62	68	66	66	63.5
Bowling Green	Maximum	87	85	89	91	91	93	82	80	91	88	88	91	90	89	89	86	90	90	86	82	77	77	77	70	85	75	77	79	77	75	92	84.5
	Minimum	69	52	52	64	65	69	65	66	68	69	69	70	69	69	67	68	63	66	67	67	70	64	59	52	54	56	65	64	69	66	66	64.5
Camp Knox	Maximum	81	79	82	88	90	91	86	79	84	79	84	84	84	86	79	82	86	86	88	86	84	70	72	77	81	81	82	84	77	86	86	82.7
	Minimum	70	52	50	59	64	68	66	68	68	70	70	68	68	68	68	64	63	66	64	66	70	61	52	50	50	55	64	59	68	66	64	63.2
Eubank	Maximum	82	74	81	87	86	87	85	77	81	81	84	82	79	84	81	83	82	85	87	86	82	73	70	77	80	83	81	84	76	87	85	81.7
	Minimum	65	52	54	59	62	62	61	65	67	68	69	67	67	69	66	67	62	60	63	65	67	65	58	49	49	53	63	64	65	68	64	62.4
Frankfort	Maximum	78	75	80	87	90	94	88	79	82	83	87	85	83	87	84	85	85	84	87	89	89	72	70	75	79	80	81	83	78	86	88	83.0
	Minimum	68	50	51	59	68	67	66	67	69	68	69	71	67	69	71	67	63	65	65	68	69	64	54	53	52	54	64	61	62	69	64	63.7
Franklin	Maximum	90	82	86	93	96	96	92	82	89	81	86	90	87	87	85	88	87	90	93	93	91	75	78	82	83	85	87	88	80	91	92	87.3
	Minimum	60	47	43	57	57	61	58	58	60	61	61	60	61	61	60	61	56	60	58	61	63	56	52	44	47	50	57	55	62	61	61	57.1
Greensburg	Maximum	84	75	85	85	88	86	87	82	81	81	81	83	81	84	80	82	83	84	85	85	84	73	71	75	78	81	81	82	78	86	85	81.8
	Minimum	65	49	47	59	61	63	62	64	66	66	67	67	67	66	68	66	68	63	64	64	65	62	55	49	51	52	62	58	66	63	62	61.5
Irvington	Maximum	82	76	80	86	89	90	88	83	84	81	85	85	84	85	81	83	85	85	86	88	85	75	72	76	76	79	79	82	78	86	86	82.6
	Minimum	68	53	54	60	66	69	67	67	69	71	70	70	69	70	70	67	63	66	67	68	70	64	54	52	52	60	62	60	70	69	66	64.6
Junction City	Maximum	86	82	83	87	90	86	83	80	81	83	85	84	81	85	82	84	86	85	87	87	82	74	72	78	80	84	83	82	78	74	88	82.6
	Minimum	66	48	48	60	60	61	59	65	67	68	66	69	66	65	68	69	68	60	61	64	65	63	52	49	49	51	62	61	64	72	65	61.7
Leitchfield	Maximum	82	80	84	88	90	92	86	79	84	78	84	83	85	80	82	82	83	86	88	85	85	70	74	78	80	79	81	83	80	85	85	82.6
	Minimum	68	52	52	62	63	68	66	66	68	69	68	66	68	68	68	67	66	68	71	68	70	63	54	52	52	56	64	61	68	67	66	64.0
Lexington	Maximum	75	72	79	88	88	87	84	78	78	79	85	81	80	82	78	80	82	82	84	87	81	70	67	74	77	81	82	81	74	83	82	80.9
	Minimum	59	55	54	62	70	65	63	66	68	66	69	67	69	69	68	67	66	68	68	70	67	59	53	57	60	62	63	63	68	67	66	64.3
Louisville	Maximum	78	77	80	88	89	91	84	77	84	83	86	83	84	86	79	82	86	86	86	87	84	69	72	77	80	81	80	84	77	81	84	82.1
	Minimum	60	55	56	60	68	72	66	67	69	72	71	68	67	70	69	67	67	67	69	71	67	61	54	59	57	62	64	62	69	68	68	65.2
Do. (Cherokee Park)	Maximum	81	75	79	84	86	87	83	78	80	81	83	79	81	82	78	80	81	82	81	85	81	72	69	73	76	77	78	81	78	79	82	79.7
	Minimum	67	63	52	58	64	70	66	66	69	70	70	69	57	69	71	65	63	65	66	69	71	62	52	54	53	57	63	61	68	68	65	64.3
St. John	Maximum	82	78	83	89	94	93	87	77	85	79	84	84	86	85	82	87	85	86	89	86	85	69	72	76	78	79	84	88	84	87	89	83.6
	Minimum	66	49	50	62	62	67	66	65	68	67	67	67	67	67	69	66	62	63	64	66	69	63	52	55	50	50	62	64	66	64	64	62.5
Scott	Maximum	74	72	77	88	90	87	82	78	80	81	81	81	81	84	81	81	83	79	87	86	82	75	70	73	77	81	82	87	79	81	82	80.7
	Minimum	62	48	52	55	63	67	64	65	67	69	68	66	66	69	71	64	60	64	66	66	70	61	50	56	51	54	63	66	64	66	64	62.3
Shelbyville	Maximum	81	79	82	90	94	93	90	78	84	83	87	87	85	88	84	86	88	86	90	92	84	81	73	79	81	83	85	85	76	85	88	84.7
	Minimum	64	45	47	55	60	64	63	62	60	65	65	66	67	65	67	61	59	62	62	65	66	60	48	50	49	53	60	57	65	66	59	59.9
Taylorsville	Maximum	82	77	82	89	87	89	86	76	80	80	85	84	84	83	82	83	83	83	86	87	85	72	70	76	77	78	81	82	76	83	84	81.7
	Minimum	68	44	46	56	61	65	65	65	68	67	67	69	68	68	70	65	62	62	63	66	67	63	52	49	48	52	62	58	67	58	62	61.4
Williamstown	Maximum	77	75	82	87	90	87	87	75	81	81	82	80	81	82	83	82	83	83	86	87	84	76	71	75	79	80	80	86	77	82	84	81.3
	Minimum	63	49	49	57	65	66	64	65	66	66	68	68	65	67	70	65	61	65	65	65	69	60	49	55	53	55	62	60	63	71	64	62.3
Eastern Division.																																	
Ages	Maximum	84	80	81	87	89	85	86	83	76	83	88	85	80	82	86	85	85	80	88	88	88	74	68	81	85	88	81	84	80	91	90	83.6
	Minimum	65	66	52	59	60	63	61	61	66	66	68	68	66	70	68	67	68	68	66	67	68	68	60	55	56	59	61	60	63	67	67	63.8
Ashland	Maximum	78	73	80	87	90	89	88	88	88	87	85	85	85	88	84	88	85	83	86	87	89	75	71	77	82	85	79	89	84	89	88	84.3
	Minimum	61	51	50	57	64	67	60	61	69	67	68	70	68	71	71	71	68	65	69	67	68	66	59	59	59	55	63	63	61	67	61	63.7
Beattyville	Maximum	83	77	84	88	91	91	91	87	83	86	89	86	84	87	90	91	88	88	94	95	91	75	72	83	84	89	85	88	86	94	90	86.6
	Minimum	66	49	48	60	62	63	61	65	61	65	67	68	65	67	69	69	65	61	64	65	65	65	58	52	55	53	63	61	62	65	62	62.9
Berea	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	78	75	79	86	89	87	84	84	78	81	83	77	83	86	86	85	84	83	88	88	88	75	70	77	80	85	83	84	78	85	87	82.5
	Minimum	65	51	52	58	65	64	62	66	67	68	66	69	68	69	65	66	63	67	67	66	68	64	55	55	55	65	61	62	69	64	60	63.3
Middlesboro	Maximum	87	78	85	86	87	83	85	79	76	80	80	79	76	75	85	82	79	79	87	86	85	74	69	76	80	85	78	82	77	88	88	81.1
	Minimum	65	57	50	59	58	63	60	63	67	67	65	69	65	69	68	67	67	66	65	65	70	67	61	55	55	59	62	60	62	66	67	63.2
Mount Sterling	Maximum	77	74	78	88	88	89	91	85	81	83	89	84	84	85	85	84	83	83	87	89	87	72	68	76	78	84	82	84	79	88	86	82.9
	Minimum	65	47	50	59	64	60	60	64	68	67	68	67	67	68	69	66	68	62	64	65	67	63	53	52	52	53	61	58	64	69	62	62.0
Richmond	Maximum	82	79	85	87	88	88	83	81	79	81	83	83	83	83	81	83	86	84	88	90	83	78	72	76	81	83	83	84	77	87	84	82.7
	Minimum	69	52	51	63	66	66	68	67	69	69	70	69	69	69	69	68	66	65	67	70	70	63	55	54	55	57	65	64	68	69	66	64.6
Williamsburg	Maximum	82	78	85	89	89	85	86	77	79	83	83	79	77	80	84	85	85	82	88	89	86	72	74	77	80	86	74	84	79	91	91	82.5
	Minimum	66	57	51	63	62	66	63	65	67	67	66	62	67	69	69	63	63	67	63	62	60	63	60	55	53	52	63	67	64	63	66	62.7

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

' '' ''' etc. indicate respectively 1, 2, 3, etc., days missing from record.


Scale of Shades
0 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 6 inches.
Over 6 inches.
Edmonton
Battleford
Prince Albert
NO PRECIP
0.5
0.5
0.5
0.5
0.5

E

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

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CLIMATOLOGICAL DATA

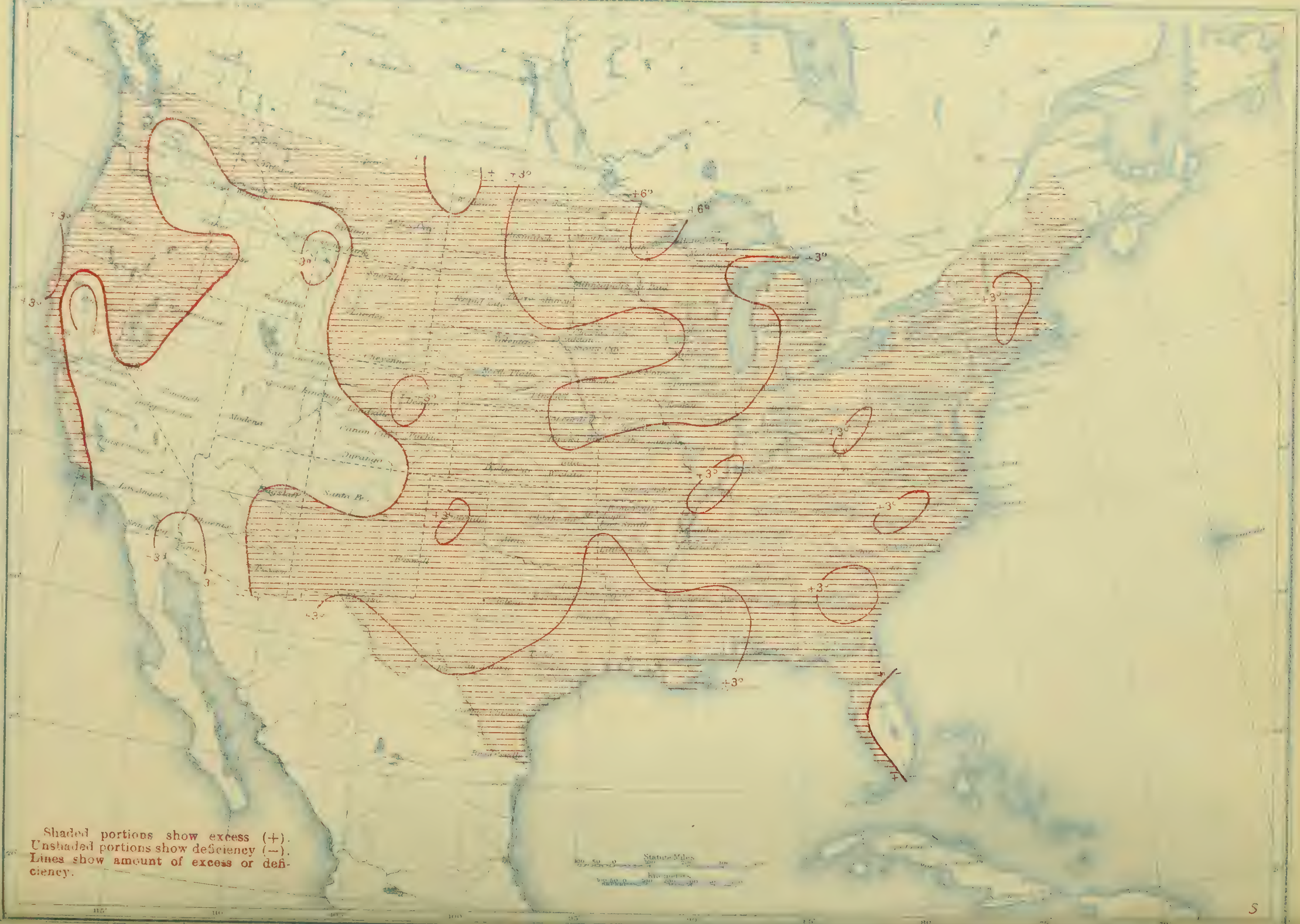
KENTUCKY SECTION

SEPTEMBER, 1920.

BY
JAMES L. KENDALL
METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
NOVEMBER 12, 1920.

Departure of the Mean Temperature from the Normal, September, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

5

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

VOL. XXV. LOUISVILLE, KY., SEPTEMBER, 1920. No. 9

GENERAL SUMMARY.

The first half of the month was cloudy, showery and generally cool. The frequent showers interfered with cutting and housing tobacco; and the damp air caused the crop in barns to cure slowly, with some "sweating" and "house-burn," particularly in the burley district. Tobacco rust continued to spread in limited areas during the rainy weather, some crops being practically a total loss. The percentage of damage from this disease, however, was not large. The low temperature and lack of sunshine delayed the maturity of corn and late tobacco, and were also unfavorable for picking and marketing fruit. More favorable weather prevailed during the last half of the month, with temperatures generally above normal, adequate sunshine, and only a few light showers. Excellent progress was made with all farm work during this period. After a few days of sunshine tobacco ceased to "sweat" and began to cure properly. The abundant sunshine and dry weather also favored the growth of late potatoes, and came when most needed for the development of this crop. This period of fine weather was unusually valuable this year because such a large part of the corn and tobacco crops was late, and required exceptionally favorable weather in late September to mature properly. Plowing for fall grain was delayed by wet soil early in the month, and because of the pressure of other work later on, so that the area made ready for seeding was relatively small. The abundant soil moisture promoted the sowing of rye as a cover crop. Pastures continued luxuriant and vegetables abundant throughout the month.

TEMPERATURE.

The average temperature for the month, 37 stations reporting, was 70.8°, which is 0.8° above normal. This was the only month of the present growing season with mean temperature above normal. The cool periods were 1st-7th, 17-20th, and 29-30th, due mostly to low minimum temperatures. During the periods 11-16th and 21st-27th maximum temperatures ranged between 80° and 95°. The extremes at the various stations were 96° on the 11th at Lone Oak, near Paducah, and 38° on the 30th at Franklin and Shelbyville.

PRECIPITATION.

The average precipitation for the State, based on the reports of 55 stations, was 3.30 inches, which is 0.54 inch above normal. The heaviest rainfall occurred in the central blue grass region and the basins of the upper Cumberland and upper Green Rivers, ranging from 4.00 to nearly 7.00 inches. Along the Ohio River, in the extreme western counties, and in the northeastern part of the State, amounts ranged between 1.00 and 3.50 inches. Monthly totals at the various stations ranged between 1.10 inches at Princeton and 6.73 inches at Burnside. Showers occurred daily in the period 1st-16th, with heavy rains in most districts on the 12th and in many localities on other dates. Light scattered showers occurred in the period 23d-28th. Thunderstorms, attended in some cases by hail, were frequent during the second week.

MISCELLANEOUS

Sept. 1.—Near Breck, Owen County, a 12-year old girl was killed by lightning.

Sept. 11.—Crops and buildings were damaged by wind in Green and Kenton counties. About 50 acres of tobacco, also corn, tomatoes and other crops, were badly damaged by a severe hailstorm in Henderson County. The path of this storm was about one mile wide and four miles long. Crops were damaged by hail in Breckenridge County. Roads in Fayette County, especially new construction, were damaged by heavy rains.

Sept. 14.—A boy and two horses were killed by lightning near Columbia. Wind and heavy rain damaged corn, tobacco, and buildings in Barren County.

Sept. 15.—A barn was burned by lightning near Blandville. Several barns were burned and much tobacco damaged by hail in McCracken County.

Rivers.—Except for freshets in headwater tributaries, caused by heavy local rains, streams were at low stages during the month.

PRESSURE AND WIND.

Stations.	Atmospheric Pressure. (In inches reduced to sea-level.)					Wind.				
	Average.	Highest.	Date.	Lowest.	Date.	Total movement.	Av. hourly velocity.	Max. Velocity.* Miles per hour	Max. Velocity.* Direction.	Max. Velocity.* Date
Cairo ....Ill.	30.00	30.23	17	29.85	12	5172	7.2	29	n.	29
Cincinnati ....Ohio	30.03	30.26	17	29.79	9	3702	5.1	27	w.	11
Evansville.......Ind.	30.03	30.23	17	29.84	9	6414	8.9	36	w.	27
Lexington ....Ky.	30.03	30.22	17	29.89	30	7454	10.4	40	w.	27
Louisville ....Ky.	30.04	30.24	17	29.85	9	6651	9.2	36	nw.	12†

*For any five minute period. †Also on 30th.

HUMIDITY AND SUNSHINE.

Stations.	Rel. Humidity.			Sunshine.				
	7 a. m.	Noon.	7 p. m.	Total hours of Sunshine.	No. of hours possible.	Percentage of possible.	Number of days with 80 per cent or more.	Number of days with 20 per cent or less.
Cairo ....Ill.	86	59	67	272.9	372.4	75	15	0
Cincinnati ....Ohio.	86	60	68	252.8	373.1	68	14	3
Evansville..................Ind.	81	57	67	264.3	372.9	71	14	0
Lexington ....Ky.	86	62	......	233.5	372.9	63	10	3
Louisville ....Ky.	84	59	69	240.8	372.9	65	13	4

COMPARATIVE DATA FOR SEPTEMBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with 01 or more rain.
1889	72.1	+2.1	101	36	1.23	−1.53	..
1890	67.0	−3.0	95	36	2.71	−0.05	..
1891	69.5	−0.5	97	42	1.89	−0.87	..
1892	68.5	−1.5	93	38	2.68	−0.08	..
1893	69.6	−0.4	99	35	3.24	+0.48	..
1894	71.7	+1.7	98	37	2.71	−0.05	..
1895	73.4	+3.4	101	27	1.10	−1.66	3
1896	68.6	−1.4	100	30	3.77	+1.01	7
1897	72.8	+2.8	105	31	0.21	−2.56	1
1898	73.4	+3.4	103	42	4.36	+1.60	9
1899	68.7	−1.3	105	27	1.66	−1.10	5
1900	74.6	+4.6	102	35	2.25	−0.51	6
1901	68.1	−1.9	98	33	3.57	+0.81	6
1902	67.3	−2.7	97	29	4.01	+1.25	10
1903	69.1	−0.9	100	32	0.91	−1.85	4
1904	71.1	+1.1	99	34	2.58	−0.18	8
1905	70.2	+0.2	95	36	2.61	−0.15	6
1906	73.0	+3.0	95	45	6.15	+3.39	13
1907	69.1	−0.9	102	35	3.00	+0.24	6
1908	71.6	+1.6	101	30	1.03	−1.73	3
1909	67.7	−2.3	97	32	2.51	−0.25	6
1910	71.8	+1.8	99	38	4.41	+1.65	9
1911	74.3	+4.3	99	46	3.71	+0.95	10
1912	71.0	+1.0	103	33	2.80	+0.04	7
1913	69.6	−0.4	106	29	2.49	−0.27	9
1914	67.8	−2.2	97	36	2.96	+0.20	6
1915	70.7	+0.7	99	32	3.32	+0.56	7
1916	67.2	−2.8	98	32	3.48	+0.72	6
1917	67.7	−2.3	98	34	2.56	−0.20	5
1918	62.8	−7.2	92	30	2.94	+0.18	8
1919	71.5	+1.5	102	40	1.69	−1.07	4
1920	70.8	+0.8	96	38	3.30	+0.54	9

Climatological Data for September, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	72.5	+ 1.9	94	11	43	30	37	4.86	+2.34	1.60	0	9	18	6	6	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	71.8	+ 0.8	89	11	39	30	29	1.74	−1.41	1.00	0	7	8	13	9	sw.	E. W. Horr.
Calhoun	McLean	437	16	71.6	− 0.6	92	11	42	30	36	2.05	−0.55	0.77	0	7	11	16	3	se.	W. A. Taylor.
Earlington	Hopkins	420	29	71.6	+ 0.5	92	11	42	30	40	2.96	+0.27	1.07	0	9	16	3	11	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	71.3	......	91	11†	41	30	35	3.29	......	1.02	0	10	10	20	0	s.	C. R. Lovell.
Henderson	Henderson	327	12	.....	.....	.....	.....	.....	.....	.....	3.24	+0.69	1.10	0	6	....	....	....	.....	W. W. Shelby.
Hopkinsville	Christian	524	23	74.3	+ 2.4	95	20	41	30	41	1.60	−1.43	0.86	0	10	10	3	17	se.	W. E. Graves.
Marion	Crittenden	571	21	72.7	+ 0.5	91	21	40	30	33	2.05	−0.99	1.00	0	3	10	15	5	s.	B. C. Paris.
Mayfield	Graves	364	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	.....	J. N. Davis.
Owensboro	Daviess	479	23	71.0	+ 0 3	89	26	43	30	28	3.55	−0.04	0.94	0	9	15^{a}	2^{a}	12^{a}	s.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	75.6	......	96	11	44	30	34	5.02	......	3.00	0	13	14	10	6	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	.....	.....	.....	.....	.....	.....	.....	3.72	+0.78	1.36	0	11	....	....	....	.....	Frank L. Brown.
Princeton	Caldwell	529	10	72.9	+ 1.5	95	21	41	30	40	1.10	−1.64	0.50	0.	5	9	14	7	s.	Dr. W. L. Cash.
Russellville	Logan	590	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	.....	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	.....	.....	.....	.....	46	30	.....	3.29	+0.13	1.56	0	5	12	12	6	sw.	Frank Hicks.
Anchorage	Jefferson	700	19	69.4	+ 0.9	91	21†	41	29	39	1.95	−0.71	0.57	0	7	18	5	7	sw.	C. E. Barret.
Bardstown	Nelson	637	23	70.3	− 1 6	89	21†	44	30	33	2.55	−0.35	0.55	0	9	23	6	1	e.	Chas. M. Talbott.
Bowling Green	Warren	500	29	72.9	+ 1.2	92	11†	48	30	35	4.64	+1.51	1.05	0	9	10	10	10	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	.....	.....	.....	.....	.....	.....	.....	5.75	......	2.20	0	12	....	....	....	.....	James H. Young.
Burnside	Pulaski	773	27	.....	.....	.....	.....	.....	.....	.....	6.73	+3.47	3.77	0	11	....	....	....	.....	F. E. Bradshaw.
Camp Knox	Hardin	763	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	....	.....	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	.....	.....	.....	.....	.....	.....	.....	2.53	−0.30	0.65	0	8	....	....	....	.....	Charlie Oliver.
Cloverport	Breckenridge	375	6	.....	.....	.....	.....	.....	.....	.....	3.85	......	1.29	0	9	....	....	....	.....	W. A. Cockerill.
Eubank	Pulaski	1177	25	69.2	+ 0.5	86	11†	43	30	35	2.58	+0.06	0.39	0	14	9	16	5	n.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	70.2	+ 1.7	87	22†	46	30	30	3.89	+1.03	1.38	0	10	17	2	11	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	72.9	+ 0.9	93	20	38	30	35	1.79	−1.57	1.40	0	4	22	7	1	s.	B. V. Hunt.
Greensburg	Green	581	27	68.5	− 1.5	86	11	41	30	32	5.90	+2.84	3.15	0	14	9	4	17	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	.....	.....	.....	.....	.....	.....	.....	4.23	+1.35	1.49	0	11	....	....	....	.....	Miss Lulu Wood.
Irvington	Breckenridge	646	22	70.8	+ 0.4	88	24	44	30	28	3.27	+0.28	1.22	0	7	17	5	8	sw.	W. J. Piggott.
Junction City	Boyle	985	26	69.5	− 0.1	89	25	43	30	38	2.93	−0.09	0.72	0	19	16	9	5	s.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	70.2	+ 0.4	89	11	42	30	29	3.52	+0.12	1.65	0	8	15	10	5	sw.	John E. Stone.
Lexington	Fayette	989	32	69.9	+ 2.0	88	21	44	30	23	4.88	+2.46	2.63	0	11	13	7	10	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	71.3	+ 1.4	88	25	46	30	29	1.79	−0.84	0.65	0	9	15	7	8	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	69.2	+ 1.2	85	22	45	30	26	2.17	−1.00	0.37	0	11	15	9	6	s.	Wm. I. Hunt.
St. John	Hardin	777	23	70.6	+ 1.5	90	11	43	30	34	2.83	−0.29	0.84	0	9	17	5	8	......	Sisters of Loretto.
Scott ¶	Kenton	900	22	68.6	− 0.9	90	21	43	30	37	2.26	−0.29	0.62	0	7	12	13	5	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	69.8	+ 0.6	93	25	38	30	39	2.10	−0.75	0.44	0	8	17	10	3	sw.	F. A. Miller.
Taylorsville	Spencer	489	17	68.2	0.0	88	16	43	30	33	2.90	−0.55	0.54	0	15	17	4	9	s.	E. D. Bourne.
Williamstown	Grant	943	17	68.6	+ 0.2	88	25	43	30	32	2.97	−0.12	1.10	0	9	16	6	8	e.	Mrs. E. S. Humlong.
Woodbury	Butler	533	2	.....	.....	.....	.....	.....		.....	3.79	......	1.22	0	14	....	....	....	.....	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	^{b}71.6	......	89	21†	45^{b}	30	33^{b}	3.36	......	1.42	0	7	10^{a}	4^{a}	15^{a}	......	S. A. Driver.
Ashland	Boyd	534	13	70.8	......	90	21†	47	30	36	2.94	......	1.10	0	7	9	7	14	w.	Forester Farley.
Beattyville	Lee	650	16	71.4	+ 2.3	94	27	46	30	38	3.59	+0.54	1.53	0	11	14	9	7	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	^{d}71.8	+ 2.5	91^{d}	20	44^{d}	30	36^{d}	4.45	+1.79	1.60	0	6	15^{d}	5^{d}	6^{d}	sw.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	.....	.....	.....	.....	.....	.....	.....	2.30	......	1.00	0	9	....	....	....	.....	P. H. Kehoe.
Falmouth	Pendleton	600	31	.....	.....	.....	.....	.....	.....	.....	3.24	+0.78	1.01	0	8	....	....	....	.....	J. V. Oldham.
Farmers	Rowan	668	12	.....	.....	.....	.....	.....	.....	.....	2.45	−0.49	1.00	0	6	13	6	11	w.	Miss Catherine Evans.
Jackson	Breathitt	776	8	.....	.....	.....	.....	.....	.....	.....	3.20	−0.62	1.10	0	6	....	....	....	.....	Jas. L. McCoy.
London	Laurel	1190	5	.....	.....	.....	.....	.....	.....	.....	3.19	......	0.80	0	11	....	....	....	.....	C. R. Lee.
Louisa	Lawrence	584	16	.....	.....	.....	.....	.....	.....	.....	2.31	−0.26	0.62	0	10	....	....	....	.....	Miss Carrie S. Adams.
Maysville	Mason	524	22	69.4	− 0.2	87	26	46	30	28	5.14	+2.51	2.10	0	7	16	5	9	ne.	Harry M. Robinson.
Middlesboro	Bell	1128	21	69.9	+ 1.1	87	20†	45	30	31	4.01	+1.26	1.60	0	11	16	14	0	.....	B. H. Perkins.
Mount Sterling	Montgomery	930	30	68.4	+ 0.8	87	21†	44	30	32	3.71	+0.77	0.98	0	10	19	4	7	w.	W. R. McKee.
Oliver	Greenup	540	0	.....	.....	.....	.....	.....	.....	.....	1.69	......	0.64	0	5	....	....	....	.....	W. C. Hash.
Pikeville	Pike	634	14	.....	.....	.....	.....	.....	.....	.....	3.02	+0,05	1.12	0	9	....	....	....	.....	I. M. Williams.
Richmond	Madison	926	25	71.8	+ 1.3	90	21	45	30	32	3.97	+1.13	1.21	0	10	13	7	10	......	J. W. Crooke.
Vanceburg	Lewis	525	3	.....	.....	.....	.....	.....	.....	.....	3.47	......	1.12	0	7	....	....	....	.....	Samuel Johnson.
Williamsburg	Whitley	939	22	71.4	+ 0.8	90	20†	45	30	32	5.20	+1.84	1.99	0	12	11	16	3	sw.	D. B. Bradley.
State averages and extremes		.....	.....	70.8	......	96	11	38	30	......	3.30	......	3.77	0	9	14	8	8	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

¶ Post-office address, Covington, Ky.

Daily Precipitation for September, 1920.

Stations	Day of month																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division																																
Beaver Dam ‖ G.	1.20				.10			.44		.01		.15		1.60	.60	.20												[illegible]				[illegible]
Blandville M.							T		.01	.38	T	.03	.19		.01								.12	T			1.00					1.74
Calhoun G.		T		T	.23		T	.16	T	.08		.77		.36	.05	T							T		T		.10			T		[illegible]
Earlington ‖ G.	.36	.05	.03		1.07			.10		.02		.63		T										T		.50	T	.10				2.86
Greenville G.				.62	.05			.28	.02	.26		1.02	.04		.12										.13		.75					3.29
Henderson ‖ O.	.10	.08										.85		1.10	T	.86												.25				3.24
Hopkinsville ‖ C.	.09		.01		.12	.03		.02		.33	.02	T	T	.02	T											.10		.26				1.00
Marion O.					T			T	T			1.00											T		.15		.90					2.05
Mayfield ‖ M.																																
Owensboro ‖ O.	.30	T			.36			T	.04			.91		.65	.22	.77								T				.21		.63		[illegible]
Paducah (Lone Oak) O.	.01	.36			.05		T	.02	.01	.14	.16	.21	.60		T	3.00							.06		.07		.33					5.02
Paducah ‖ O.	.56	.10			.16				T	.08	.10	.16	.42	.08		1.36							T			.46		.31				3.79
Princeton G.		.06		.50			T	T	T	T	T	T	.01		T								.10		T	T	.43					1.10
Russellville ‖ G.																																
Central Division.																																
Alpha C.								.26	.15	T		1.56	T	.68											T		.61					3.29
Anchorage O.					.56			.09	.41		.07	.57	T	.01	.24												T					1.95
Bardstown ‖ S.	.25			.16	.10			T	.55		.30	.33		.23		.23								.10								2.25
Bowling Green ‖ G.	.65							T		1.05		.35	1.00	.04	.75	.07										.25	T	.48				4.64
Brownsville ‖ G.	.33			.04				.07	.11	.19		2.07	.03	2.20	.37	.10									.10	T	T	.14	T			5.75
Burnside ‖ C.	.23			.24				T	.16	.28		3.77	.59	.10		.07								.83		.20		.35				6.73
Camp Knox¶ O.					.60	.25			.32	.17		.65				.16									.11			.27				2.53
Carrollton ‖ (Lock No. 1) O.	.25	T	.02		.04			.04	.87	T		1.29		.02		1.00								T			T	.32		T		3.85
Cloverport ‖ O.	.08							.06	.07	.08	.11	.39	.37	.38	.10	.16								.06	.34	.03		.35				2.58
Eubank ‖ C.				.03	1.00	.03		.05	.34		.06	1.38				.23								T	.03	T		.74				3.89
Frankfort ‖ K.												1.40	.31	.04													.04					1.79
Franklin G.																																
Greensburg ‖ G.	.06				.17			.15	.01	1.18		3.15	.16	.01	.06	.27								.01	.15	.05		.47				5.90
High Bridge ‖ K.			.03	.03	.58	.05			.07		1.49	1.00				.07								.04	.02			.85				4.23
Irvington O.		T			T	T		1.22	.62		.09	.75	T	T	.28	.21											.10			T		3.27
Junction City K.	.05	.02		.01	.48			.21	.24	.52	.16		.07	.04	.16	.01		.01	.03					T	.72	.03	.10	.02		.05		2.93
Leitchfield G.					.13			.37	.11		.70	.95		.39	.65										T		.22			T		3.52
Lexington *** K.				.52	.68			.01	.54	.01	.32	2.31			.08									.06	T		.29			.06		4.88
LOUISVILLE*** O.				.26	.39			.13	.27		T	.25	.03	.04	.34									T			.08			T		1.79
Do. (Cherokee Park) O.		T			.27	.03		.16	.37		T	.20	.03	.10	.35									.05	.36		.25					2.17
St. John ‖ S.	.10		T		.12			.66	.05	.01		.52	T	T		.84										.23		.30				2.83
Scott L.					.62				.57		.26				.25	.01								.37			.18			T		2.26
Shelbyville ‖ S.					.19	.44			.36		.07	.27				.37									.03			.37				2.10
Taylorsville S.		.04		.54	.30			.17	.54	.01	.08	.46	.04	.02	.22									.20	.14		.08			.06		2.90
Williamstown ‖ L.	.05				1.10	.45			.22	.11		.04				.12									.18			.70				2.97
Woodbury ‖ G.	.32	T	T		.05	.35		.14		.08		1.22	.04	.74	.52	.06									.02		.06	.13		.06		3.79
Eastern Division.																																
Ages K.						T		T	.28		1.42	1.00	T	.02		T								.33	.08		.23					3.36
Ashland O.	.28					.31			.48			1.10				.02									.48			.27				2.94
Beattyville ‖ K.	.21		T	.20	.15				.11	.02	.09	1.53	T	T	.27	.12								T	.87			.02				3.59
Berea K.					1.60				.01	.14	1.36	.30												1.04						T		4.45
Cynthiana ‖ L.	T			T	1.00	.05	T		.10	.05	T	.15	.05			.20								.10				.60				2.30
Falmouth ‖ L.	.16				1.01	.20			.19			.02				.35									.55			.76				3.24
Farmers ‖ L.				T	.35	T			1.00			.10			T	.20	T		T						.30			.50				2.45
Jackson ‖ K.	.50			T	T				1.00		.10	1.10		T		T									.40			.10		T		3.20
London ‖ C.	.40						.10	.20	.38	.24		.80	.45	.28	.10	.04									.20							3.19
Louisa ‖ B.	.31				.06				.03	.30		.35	.03	.01												.40	.62			.20		2.31
Maysville ‖ O.				2.10	1.13			.10	T		.36			.81										.22				.42				5.14
Middlesboro C.	.16							.14	.03	.48	.40	1.60		.71		.30								.07	.08		.04					4.01
Mount Sterling ‖ L.	.19			.02	.16	.16		T	.98	.02	.50	.89		T		.11												.68				3.71
Oliver ‖ O.	.64				.28				.18				.27																.32			1.69
Pikeville ‖ B.	.42			.22	.38				.12		.08	1.12				.48												.12		.08		3.02
Richmond K.		T		T	.40	.31			.43	T	.65	1.21	.02		T	.20									.45	.02		.28		T		3.97
Vanceburg ‖ O.	.55					1.12			.33	.08		.13													.28			.98				3.47
Williamsburg ‖ C.	.72	.05				.06			.17	.68		1.99	.78		.22	.02								.08	T	.05		.38				5.20

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

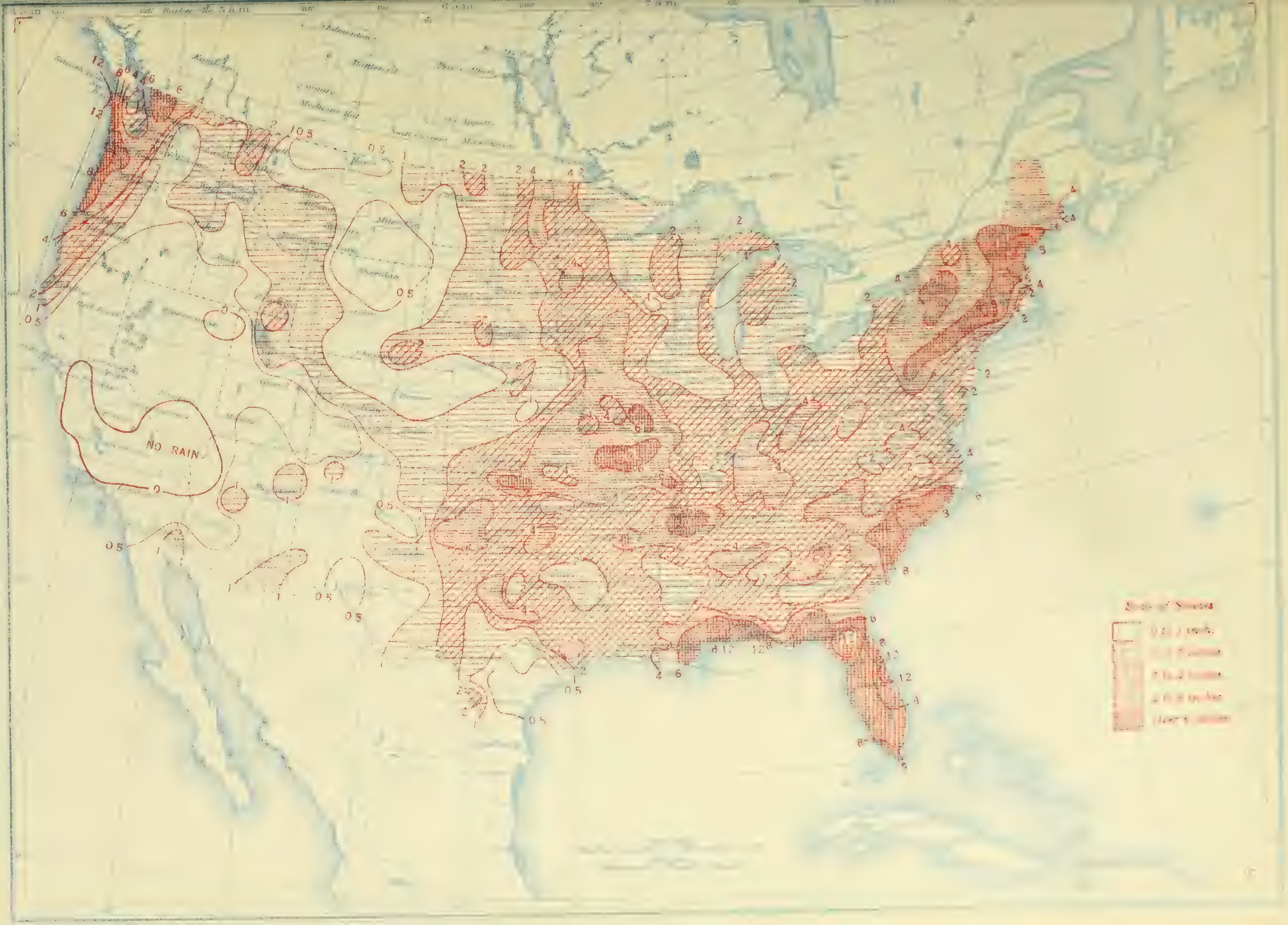
¶ Precipitation for 24 hours ending at 3 p. m.

Daily Temperatures for September, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	85	79	83	84	83	84	86	82	83	87	94	91	84	84	84	84	82	85	89	91	92	90	89	89	92	92	87	84	70	60	..	85.0
	Minimum	63	64	51	50	66	55	61	64	56	60	70	65	64	67	68	65	51	50	52	54	60	62	62	70	65	65	65	61	50	43	..	60.0
Blandville	Maximum	82	77	76	81	80	80	75	78	81	85	89	87	81	88	88	82	79	81	84	85	88	85	78	88	88	87	80	80	65	58	..	81.2
	Minimum	66	61	57	57	64	59	65	67	66	64	70	74	66	70	73	63	54	53	55	59	62	64	64	70	68	68	64	58	48	39	..	62.3
Calhoun	Maximum	80	77	79	82	80	77	78	76	83	81	91	90	83	87	86	84	81	86	89	90	89	87	84	89	88	87	85	83	80	58	..	83.0
	Minimum	64	62	54	56	66	57	61	65	64	58	68	65	67	66	69	63	54	50	51	56	59	60	62	68	65	64	64	61	49	42	..	60.3
Earlington	Maximum	83	76	84	83	82	83	82	78	80	85	92	90	84	89	87	84	80	84	87	90	91	88	82	87	90	89	84	82	60	59	..	83.2
	Minimum	63	62	53	55	62	56	60	65	67	59	71	66	67	68	70	63	49	48	50	50	59	59	66	70	64	64	66	59	47	42	..	60.0
Greenville	Maximum	82	75	79	83	82	82	85	81	80	85	91	90	83	88	87	82	79	74	85	89	91	88	80	88	89	89	85	81	74	59	..	82.9
	Minimum	61	62	57	56	62	57	60	64	66	59	69	65	66	65	67	65	52	49	50	54	59	59	61	68	63	61	64	60	48	41	..	59.7
Hopkinsville	Maximum	87	78	84	88	87	85	84	85	83	88	94	92	89	93	92	88	85	90	93	95	93	92	84	89	91	90	85	84	71	61	..	86.7
	Minimum	63	63	54	59	64	59	63	66	66	61	69	70	67	69	69	66	55	51	52	55	60	69	70	69	65	65	66	62	48	41	..	61.9
Marion	Maximum	82	75	78	81	81	81	80	77	81	83	89	88	82	87	87	82	80	84	87	90	91	89	80	88	89	89	87	81	81	58	..	82.9
	Minimum	66	61	58	57	65	61	64	65	66	62	70	66	68	70	72	63	53	55	59	59	65	65	68	70	68	69	64	58	48	40	..	62.5
Mayfield §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro	Maximum	80	73	78	82	79	77	83	79	80	83	87	86	78	82	82	81	79	82	84	86	88	86	83	85	88	89	82	79	56	48	..	80.2
	Minimum	64	64	56	55	60	58	59	63	66	59	70	65	68	68	69	65	57	54	60	58	62	63	63	69	66	65	67	62	52	43	..	61.7
Paducah (Lone Oak)	Maximum	82	81	82	86	88	90	85	80	85	90	96	95	86	90	84	82	82	85	87	90	94	91	85	91	94	93	90	89	68	61	..	86.1
	Minimum	71	70	59	60	68	71	66	67	64	60	69	70	72	70	68	68	58	55	53	62	68	70	68	69	68	67	70	68	57	44	..	65.0
Princeton	Maximum	85	76	80	86	84	84	84	80	82	88	92	90	88	91	89	85	82	87	91	92	95	92	81	91	94	93	84	83	62	60	..	85.0
	Minimum	63	62	55	59	62	56	63	65	65	61	69	75	66	67	68	60	55	50	51	55	59	60	69	68	64	64	64	60	49	41	..	60.8
Russellville§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	70	65	71	70	70	61	70	70	71	72	76	69	66	68	76	72	68	66	72	72	75	70	73	74	72	75	67	65	56	46	..	68.9
Anchorage	Maximum	82	73	73	78	81	80	82	75	81	82	88	86	82	89	80	84	72	84	86	90	91	90	88	86	91	89	86	82	62	57	..	81.7
	Minimum	57	58	51	56	61	57	54	61	62	61	62	64	60	60	66	60	51	45	49	54	56	59	56	64	63	61	64	57	41	42	..	57.1
Bardstown	Maximum	81	71	77	75	78	82	81	76	78	82	86	87	83	84	79	82	77	81	84	87	89	89	87	84	89	89	87	79	67	54	..	80.8
	Minimum	60	60	51	58	60	58	57	65	65	62	62	62	65	63	68	69	54	49	51	56	60	61	58	65	66	64	65	65	51	44	..	59.8
Bowling Green	Maximum	86	75	85	80	82	86	84	76	81	87	92	90	84	87	84	86	80	85	88	90	90	90	90	89	92	89	90	83	71	61	..	84.4
	Minimum	63	63	53	60	66	59	62	65	65	62	69	67	66	66	67	70	54	51	53	56	61	62	59	70	66	65	63	60	51	48	..	61.4
Camp Knox	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Eubank	Maximum	80	70	77	73	77	79	81	73	75	81	86	78	78	83	78	81	78	82	85	86	86	85	85	83	86	85	84	78	68	54	..	79.2
	Minimum	63	59	54	64	65	57	56	63	63	61	61	65	63	63	62	67	54	47	50	54	57	60	56	63	63	63	64	64	48	43	..	59.1
Frankfort	Maximum	80	72	76	75	77	81	80	76	78	80	86	83	82	83	81	81	80	79	81	85	86	87	84	83	87	86	87	78	72	58	..	80.1
	Minimum	60	59	54	58	63	59	58	63	66	64	63	67	66	64	64	68	56	49	53	57	58	61	58	66	65	63	64	61	54	46	..	60.2
Franklin	Maximum	82	76	82	82	82	83	81	87	88	88	90	88	88	89	88	86	81	87	90	93	90	89	88	90	90	90	89	86	72	58	..	85.1
	Minimum	52	62	52	55	64	64	60	64	66	66	67	66	62	66	67	62	56	54	56	58	64	62	60	67	68	64	67	58	55	38	..	60.7
Greensburg	Maximum	80	70	78	74	77	80	80	74	77	80	86	81	79	78	78	81	75	79	81	84	85	84	83	83	85	85	85	77	69	53	..	78.7
	Minimum	64	59	59	60	64	55	57	62	63	58	63	65	63	63	64	65	50	47	49	53	56	58	55	64	62	60	60	60	49	41	..	58.3
Irvington	Maximum	79	74	77	78	79	79	80	77	79	81	87	85	80	82	77	81	77	77	81	84	85	86	87	88	87	87	80	78	69	56	..	79.9
	Minimum	63	62	54	57	68	59	57	62	65	62	70	66	67	67	71	68	56	53	53	57	62	63	65	67	66	65	65	62	51	44	..	61.6
Junction City	Maximum	81	78	78	75	81	79	82	71	79	87	81	84	85	83	78	82	77	84	85	86	88	88	87	84	89	86	85	78	68	60	..	81.0
	Minimum	60	57	50	59	59	61	55	61	61	60	66	66	67	62	62	67	51	46	48	52	57	57	57	62	63	62	61	60	47	43	..	58.0
Leitchfield	Maximum	81	74	79	76	79	79	80	76	77	82	89	86	78	83	78	82	77	81	82	85	86	86	83	82	86	85	86	78	70	54	..	80.0
	Minimum	63	62	53	68	66	56	61	64	64	60	68	66	67	66	61	69	55	52	53	56	60	62	60	69	65	53	64	60	51	42	..	60.5
Lexington	Maximum	76	67	74	73	75	77	79	74	76	78	84	79	79	84	79	79	73	79	81	86	88	86	85	81	87	85	82	76	66	50	..	77.9
	Minimum	62	58	52	60	63	62	62	65	64	63	67	62	65	66	65	62	55	57	65	63	68	67	63	67	68	70	64	62	45	44	..	61.9
Louisville	Maximum	79	72	77	76	80	79	81	74	79	82	86	85	80	85	78	82	78	83	84	87	88	88	85	84	88	87	84	80	66	56	..	80.4
	Minimum	63	61	54	58	64	63	61	65	65	64	68	65	69	66	70	62	56	54	57	60	64	67	64	70	68	67	67	62	47	46	..	62.2
Do. (Cherokee Park)	Maximum	78	72	74	75	77	76	77	75	78	79	84	83	80	81	77	78	74	76	79	82	84	85	83	81	84	84	81	76	72	55	..	78.0
	Minimum	61	61	53	57	63	60	58	65	64	63	66	65	65	64	69	66	54	50	53	57	62	62	60	66	65	60	67	63	51	45	..	60.5
St. John	Maximum	80	71	77	76	80	82	81	82	77	85	90	87	79	82	77	82	76	83	85	88	88	86	85	83	88	88	87	87	63	58	..	81.1
	Minimum	60	60	52	58	64	57	57	63	64	64	65	65	65	65	68	67	53	49	51	55	65	61	61	68	64	64	63	60	51	43	..	60.1
Scott	Maximum	78	70	73	75	69	78	78	75	77	80	84	79	79	88	78	81	72	82	78	86	90	87	85	82	89	86	77	78	69	61	..	78.8
	Minimum	58	56	51	54	63	59	54	58	63	63	63	65	59	60	62	62	54	45	54	55	59	62	69	67	64	63	65	59	51	43	..	58.3
Shelbyville	Maximum	82	75	77	79	80	82	83	76	81	83	91	86	85	91	78	85	78	85	87	90	91	90	88	86	93	91	90	83	68	55	..	83.0
	Minimum	55	54	47	53	59	55	54	61	61	58	61	62	61	61	66	63	51	46	49	55	58	59	58	64	62	61	62	58	48	38	..	56.7
Taylorsville	Maximum	77	71	76	74	77	79	77	74	77	81	86	83	75	82	78	88	74	79	82	84	83	85	83	82	84	84	85	78	68	55	..	78.7
	Minimum	59	57	50	54	62	54	55	62	62	61	62	65	63	62	65	66	53	46	49	53	55	58	56	62	62	61	61	63	50	43	..	57.7
Williamstown	Maximum	77	73	76	73	74	77	79	73	76	77	84	79	78	84	79	79	76	81	84	85	88	87	84	80	88	87	80	77	69	60	..	78.8
	Minimum	56	55	49	55	61	59	56	60	62	61	62	65	60	60	61	63	53	49	55	58	62	62	57	65	65	65	63	59	49	43	..	58.3
Eastern Division.																																	
Ages	Maximum	88	..	78	80	87	88	81	72	81	81	82	78	84	82	84	86	87	84	87	88	89	86	88	80	..	89	89	80	80	63	..	[b]82.9
	Minimum	67	..	59	60	61	62	58	60	61	63	60	63	64	65	62	67	54	53	54	58	61	62	57	64	..	65	64	63	57	45	..	[b]60.3
Ashland	Maximum	88	74	78	75	75	83	80	78	80	80	87	85	81	82	85	82	76	83	88	87	90	85	86	85	89	90	90	80	75	64	..	82.0
	Minimum	61	53	52	57	65	61	57	56	65	66	60	65	66	67	57	69	53	49	52	54	60	59	57	69	67	65	65	63	53	47	..	59.7
Beattyville	Maximum	85	83	80	74	79	84	83	71	79	85	87	84	88	85	87	85	79	87	89	92	93	89	89	84	92	92	94	82	73	60	..	83.8
	Minimum	63	55	52	60	63	61	56	59	61	61	58	64	61	65	61	69	51	49	53	57	59	60	54	63	63	66	65	64	52	46	..	59.0
Berea	Maximum	..	..	83	80	83	82	90	..	85	90	87	82	86	84	84	78	85	86	90	91	88	90	..	83	90	90	87	80	72	51	..	[d]83.7
	Minimum	..	..	58	61	64	61	56	..	61	64	64	64	64	65	62	50	55	51	54	60	61	60	..	66	67	70	65	58	51	44	..	[d]59.8
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Maysville	Maximum	87	79	74	75	75	81	76	77	78	78	86	84	76	82	84	81	75	79	80	81	86	84	82	78	86	87	86	76	65	55	..	79.1
	Minimum	69	56	52	57	64	60	58	60	63	64	61	66	62	62	60	67	55	51	54	56	60	61	58	67	66	66	65	63	53	46	..	59.8
Middlesboro	Maximum	82	77	74	76	75	81	80	72	80	82	77	76	80	77	80	85	77	84	84	87	87	82	86	78	84	86	87	81	78	63	..	79.9
	Minimum	65	60	61	62	63	61	57	62	61	61	60	63	60	64	63	66	53	53	56	58	61	60	56	61	63	64	62	61	55	45	..	59.9
Mount Sterling	Maximum	78	68	75	76	78	81	79	73	80	80	85	82	82	84	83	81	74	80	83	86	87	83	83	85	86	87	85	78	65	52	..	79.3
	Minimum	58	55	48	57	65	61	55	60	61	63	60	62	63	60	57	70	53	48	51	56	58	59	56	57	59	60	61	60	52	44	..	57.6
Richmond	Maximum	81	76	80	76	78	81	82	72	77	81	87	86	83	85	85	84	80	84	86	89	90	88	89	85	87	89	86	80	74	60	..	82.0
	Minimum	62	57	53	62	65	63	59	64	64	63	66	64	64	65	64	71	55	52	56	59	65	65	61	67	68	66	68	64	55	45	..	61.7
Williamsburg	Maximum	83	75	76	76	78	84	82	73	83	83	89	80	82	79	82	85	79	85	85	90	88	85	87	83	89	88	90	80	78	61	..	81.9
	Minimum	65	60	60	60	63	62	59	64	65	61	63	63	63	67	64	68	53	54	57	58	61	62	56	64	64	65	64	62	56	45	..	60.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a] [b] [c] etc. indicate respectively 1, 2, 3, etc., days missing from record.


Edmonton
Battleford
Calgary
Medicine Hat
Kamloops
NO RAIN
Scale of Shades
0.5 to 1 inch.
1 to 2 inches.
2 to 4 inches.
4 to 8 inches.
Over 8 inches.

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CLIMATOLOGICAL DATA

KENTUCKY SECTION

OCTOBER, 1920.

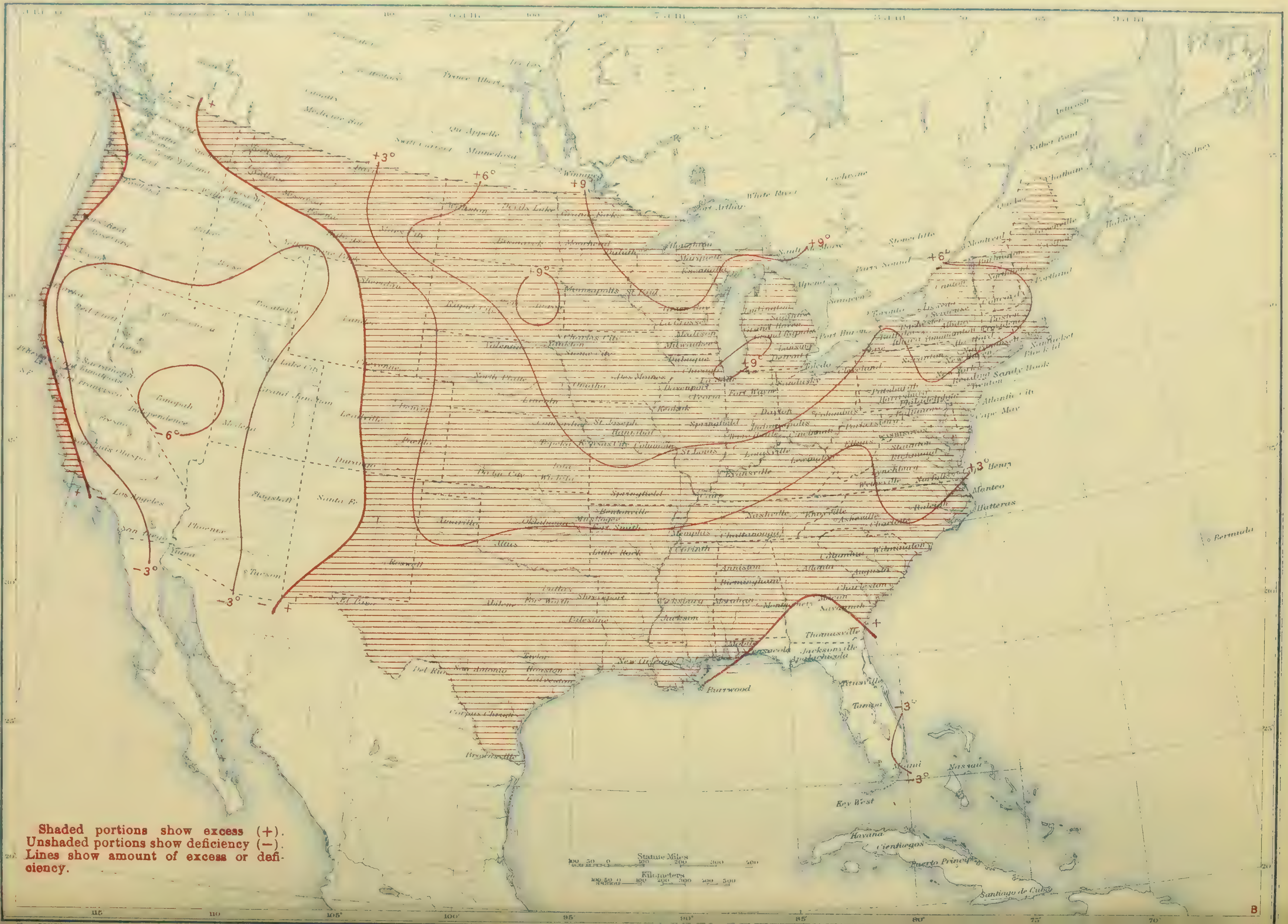
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY
WEATHER BUREAU OFFICE
DECEMBER 15, 1920.

Departure of the Mean Temperature from the Normal, October, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

Vol. XXV. Louisville, Ky., October, 1920. No. 10

GENERAL SUMMARY.

Exceptionally fine weather, a continuation of conditions prevailing during the last half of September, characterized the first 25 days of October. Sunshine approximating the full amount possible was received nearly every day during this period; while the temperature from the 10th to 26th, inclusive, was continuously above normal. The abundant sunshine and high temperature were especially favorable and timely for maturing and drying out late corn; also for the work of cutting and housing late tobacco, which proceeded without hindrance to its completion near the middle of the month. A few abnormally cool and somewhat windy days near the beginning of the month were unfavorable for curing tobacco, otherwise the dryness of the air and the high temperature greatly hastened the curing process and stripping began during the last week. Frost occurred in the central and western counties on the 2d, causing some damage to the foliage of corn and tender vegetables in valleys and depressions, but crops on uplands were not injured. Killing frost, closing the growing season, occurred in most districts on the 29th, and generally over the State on the 30th, nearly two weeks later than the average date of this event.

Except for moderate showers during the last week, practically no rain occurred. By the middle of the month the soil was too dry to be worked satisfactorily, and seeding of wheat was hindered to some extent. This work was generally completed, however, before the end of the month. Wheat sown early in the month came up well, but that sown later failed to germinate until the rains of the last week. Pastures became very short, and stock water rather scarce in some dry districts. Late potatoes and sweet potatoes matured good crops. Gardens provided an abundance of vegetables throughout the month, and fruit was picked and marketed under ideal conditions. The quality of fruits and vegetables was especially fine, due largely to the long period of dry, warm weather.

TEMPERATURE.

The average temperature for the month, 39 stations reporting, was 61.0°, which is 3.2° above normal. Minimum temperatures in the thirties occurred generally on the first two days and in the period 28th-31st; but warm, summer-like weather prevailed during the remainder of the month. Maximum temperatures of 80° or higher were registered generally in the period 7th-23d, and 90° or above at several stations in the period 18th-23d. On account of the clear skies and excessive radiation at night, the daily range in temperature was somewhat larger than usual. The extremes at the various stations were 93° at Beattyville on the 21st, and 24° at several stations in the central counties on the 30th.

PRECIPITATION.

The average precipitation for the State, based on the reports of 56 stations, was 1.64 inches, which is 0.86 inch less than normal. The month's rainfall occurred mostly as showers in the period 24-29th, with heavy rains in many localities on the 26th and 27th. Precipitation was heaviest in the north-central counties and along the Ohio River, where it ranged from two to four inches. About 1.5 inches occurred in the west-central counties and mountain districts; while in the southern border counties amounts were less than an inch, and insufficient for agricultural requirements. The monthly totals at the various stations ranged between 0.15 inch at Mayfield and 4.00 inches at Lone Oak, near Paducah. Local thunderstorms occurred on the 4th, 18th, 26th, and 27th, but without damage.

MISCELLANEOUS

Rivers.—Stages in the Ohio and tributary streams were very low during the month, and navigation was possible only by artificial waves, or in sections where a pool-stage was maintained by dams. The river was especially low in the Catlettsburg-Maysville section and between Louisville and Paducah. The rains of the 26-27th caused a slight rise in the upper reaches near the end of the month.

PRESSURE AND WIND.

Stations.	Atmospheric Pressure. (In inches reduced to sea-level.)					Wind				
								Max. Velocity.*		
	Average.	Highest.	Date.	Lowest	Date.	Total movement	Av. hourly velocity.	Miles per hour	Direction.	Date.
Cairo ... Ill.	30.12	30.45	30	29.64	26	4947	6.6	33	n.	28
Cincinnati ... Ohio	30.16	30.52	30	29.60	27	4142	5.6	30	sw.	27
Evansville ... Ind.	30.15	30.50	30	29.62	26	6722	9.0	36	s.	15
Lexington ... Ky.	30.17	30.52	30	29.67	27	8991	12.1	40	sw.	27
Louisville ... Ky.	30.16	30.52	30	29.61	26	6646	8.9	37	s.	15

*For any five minute period.

HUMIDITY AND SUNSHINE.

Stations.	Rel. Humidity.			Sunshine.				
							Number of days with	
	7 a. m.	Noon	7 p. m.	Total hours of Sunshine.	No. of hours possible	Percentage of possible.	80 per cent or more.	20 per cent or less
Cairo ... Ill.	81	49	61	258.8	348.1	74	20	5
Cincinnati ... Ohio.	84	45	63	254.4	346.1	74	20	5
Evansville ... Ind.	75	44	53	249.5	347.3	72	19	4
Lexington ... Ky.	71	51	......	257.1	347.3	74	19	4
Louisville ... Ky.	75	45	50	264.7	347.3	76	22	4

COMPARATIVE DATA FOR OCTOBER.

Year.	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal	Highest	Lowest.	Monthly average.	Departure from 30-year normal.	No. of days with .01 or more rain
1889	52.0	−5.8	89	23	2.42	−0.08	
1890	55.7	−2.1	87	23	2.94	+0.44	.
1891	54.8	−3.0	92	21	0.78	−1.72	.
1892	57.3	−0.5	97	19	0.51	−1.99	..
1893	56.4	−1.4	90	19	4.00	+1.50	..
1894	58.6	+0.8	92	25	1.36	−1.14	5
1895	52.2	−5.6	89	14	1.24	−1.26	4
1896	55.8	−2.0	90	25	1.71	−0.79	5
1897	63.2	+5.4	96	26	1.10	−1.40	4
1898	57.1	−0.7	93	21	4.19	+1.69	10
1899	61.3	+3.5	93	26	2.42	−0.08	5
1900	64.5	+6.7	94	29	2.29	−0.21	5
1901	58.1	+0.3	93	25	1.57	−0.93	4
1902	60.1	+2.3	91	25	2.34	−0.16	5
1903	57.7	−0.1	96	19	2.22	−0.28	5
1904	57.2	−0.6	93	20	0.52	−1.98	2
1905	57.0	−0.8	90	25	4.95	+2.45	9
1906	56.9	−0.9	91	20	1.51	−0.99	7
1907	55.5	−2.3	93	20	2.97	+0.47	6
1908	57.1	−0.7	92	20	0.71	−1.79	3
1909	55.2	−2.6	94	18	2.11	−0.39	6
1910	61.4	+3.6	96	17	4.45	+1.95	6
1911	59.9	+2.1	94	27	3.71	+1.21	10
1912	59.5	+1.7	92	25	1.42	−1.08	4
1913	56.9	−0.9	97	23	3.55	+1.05	9
1914	59.7	+1.9	91	22	5.10	+2.60	9
1915	60.6	+2.8	90	27	3.40	+0.90	6
1916	57.6	−0.2	97	24	2.59	+0.09	6
1917	51.1	−6.7	90	20	3.18	+0.68	7
1918	62.3	+4.5	91	32	3.81	+1.31	10
1919	65.6	+7.8	98	35	7.99	+5.49	15
1920	61.0	+3.2	93	24	1.64	−0.86	4

Climatological Data for October, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	63.2	+ 5.8	89	21†	26	30	50	1.05	−1.39	0.80	0	3	21	9	1	sw.	Miss Addie B. Taylor.
Blandville	Ballard	415	38	62.8	+ 4.7	84	17†	28	29	33	1.97	−1.03	1.16	0	3	20	5	6	sw.	E. W. Horr.
Calhoun	McLean	437	16	62.3	+ 3.0	88	13†	28	29†	48	1.16	−2.12	0.60	0	5	17	9	5	se.	W. A. Taylor.
Earlington	Hopkins	420	29	61.9	+ 2.6	87	18	26	29†	44	1.30	−1.27	1.16	0	4	25	0	6	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	^{b}61.4		88^{b}	21†	25^{b}	29†	50^{b}	1.04		0.60	0	4	15^{b}	10^{b}	4^{b}	w.	C. R. Lovell.
Henderson	Henderson	327	12								2.38	−0.72	1.85	0	3					W. W. Shelby.
Hopkinsville	Christian	524	23	63.4	+ 3.0	89	17	32	29†	49	0.40	−2.47	0.25	0	3	18	2	11	sw.	W. E. Graves.
Marion	Crittenden	571	21	64.8	+ 5.4	85	14†	28	29	34	2.18	−0.36	1.75	0	2	17	9	5	sw.	B. C. Paris.
Mayfield	Graves	364	10								0.15	−2.40	0.15	0	1	27	0	4	s.	N. E. Douthit.
Owensboro	Daviess	479	23	62.6	+ 3.6	86	15†	29	29	39	1.88	−0.22	1.10	T.	4	21	4	6	s.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	63.8		92	18	36	29	36	4.00		3.11	0	4	24	0	7	s.	E. Futrell, Jr.
Paducah	McCracken	341	31								2.92	+0.24	2.30	0	3					Frank L. Brown.
Princeton	Caldwell	529	10	62.6	+ 3.8	90	18	26	29	46	1.94	−0.16	1.73	0	4	16	9	6	s.	Dr. W. L. Cash.
Russellville	Logan	590	6																	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25													24	2	5	w.	Frank Hicks.
Anchorage	Jefferson	700	19	59.8	+ 3.0	88	23	24	30	48	2.80	−0.25	1.17	0	4	21	5	5	sw.	C. E. Barret.
Bardstown	Nelson	637	23	60.2	+ 0.7	86	23	26	30	43	1.23	−1.17	0.95	0	3	26	2	3	s.	Chas. M. Talbott.
Bowling Green	Warren	500	29	62.4	+ 3.2	89	16†	28	30†	46	1.75	−0.62	0.95	0	3	21	6	4	s.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2								1.07		0.68	0	6					James H. Young.
Burnside	Pulaski	773	27								0.85	−2.18	0.72	0	2					F. E. Bradshaw.
Camp Knox	Hardin	736	0	61.6		86	21†	28	29†	40	2.21		1.66	0	4	17	7	7	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1	Carroll	492	21								2.04	−0.61	1.63	0	5					Charlie Oliver.
Cloverport	Breckenridge	375	6								2.58		2.24	0	5					W. A. Cockerill.
Eubank	Pulaski	1177	25	58.2	+ 1.5	86	17	24	30	44	0.91	−1.23	0.75	0	2	15	8	8	s.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	60.0	+ 3.5	83	23	30	30	38	1.63	−0.84	1.28	0	6	26	1	4	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	64.0	+ 4.7	91	20	27	29	46	0.72	−1.38	0.67	0	3	24	2	5	s.	B. V. Hunt.
Greensburg	Green	581	27	59.8	+ 3.3	83	14†	24	30	44	2.53	−0.23	1.27	0	4	14	9	8	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17								2.44	−0.03	1.25	0	6					Miss Lulu Wood.
Irvington	Breckenridge	646	22	61.8	+ 6.2	83	14	29	30	33	1.13	−1.62	0.93	T.	3	25	0	6	sw.	W. J. Piggott.
Junction City	Boyle	985	26	58.9	+ 1.4	87	23	24	30	47	2.32	+0.33	1.12	0	6	24	1	6	s.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	60.3	+ 2.2	84	21†	28	30	38	1.27	−1.16	1.10	0	3	23	5	3	sw.	John E. Stone.
Lexington	Fayette	989	32	62.1	+ 5.6	84	22	30	20	24	2.75	+0.53	2.05	0	7	19	7	5	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	63.0	+ 4.6	86	23	32	30	34	1.55	−1.08	1.27	0	4	20	6	5	s.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	60.2	+ 3.0	81	13†	29	30	36	1.76	−1.66	1.27	0	3	22	3	6	s.	Wm. I. Hunt.
St. John	Hardin	777	23	60.2	+ 2.6	86	21	26	30	46	1.56	−0.93	1.13	0	3	26	1	4		Sisters of Loretto.
Scott[*]	Kenton	900	22	61.0	+ 3.2	86	21†	28	30	39	1.77	−0.57	1.27	0	3	18	8	5	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	61.2	+ 4.5	91	23	24	30	49	1.08	−1.34	0.96	0	3	22	5	4	sw.	F. A. Miller.
Taylorsville	Spencer	489	17	57.8	+ 1.8	83	21†	24	30	44	0.73	−1.82	0.63	0	4	22	2	7	s.	E. D. Bourne.
Williamstown	Grant	943	17	60.9	+ 3.9	84	21†	29	30	32	2.27	−0.61	1.63	0	4	21	5	5	nw.	Mrs. E. S. Humlong.
Woodbury	Butler	533	2								1.41		1.26	0	5					J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	56.0		78	10	29	30	36	1.93		1.93	0	1	17	7	7	n.	S. A. Driver.
Ashland	Boyd	534	13	60.8		88	12	28	30	44	1.06		0.72	0	4	20	6	5	w.	Forester Farley.
Beattyville	Lee	650	16	61.0	+ 3.9	93	21	26	30	49	1.00	−2.16	0.67	0	4	20	4	7	se.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	^{a}61.8	+ 3.3	88^{a}	23	29	30	45	1.05	−2.02	0.53	0	4	22^{a}	6^{a}	2^{a}	sw.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2								2.40		1.70	0	3					P. H. Kehoe.
Falmouth	Pendleton	600	31								2.24	−0.20	1.73	0	4	21	4	6	sw.	J. V. Oldham.
Farmers	Rowan	668	12	55.3	− 1.3	82	19	26	30	50	1.30	−2.00	1.00	0	2	20	10	1	e.	Miss Avis Norman.
Jackson	Breathitt	776	8								1.50	−2.09	0.90	0	2					Nick Kelly.
London	Laurel	1190	5								0.60		0.40	0	2					C. R. Lee.
Louisa	Lawrence	584	16								0.76	−2.12	0.60	0	3					Miss Carrie S. Adams.
Maysville	Mason	524	22	59.2	+ 2.1	81	15†	30	30	36	2.13	−0.39	1.07	0	5	22	0	9	w.	Harry M. Robinson.
Middlesboro	Bell	1128	21	59.0	+ 1.8	84	23	27	30†	38	1.73	−0.57	1.58	0	3	25	6	0		B. H. Perkins.
Mount Sterling	Montgomery	930	30	59.1	+ 3.5	84	21	27	30	41	2.09	−0.88	1.20	0	3	23	6	2	w.	W. R. McKee.
Oliver	Greenup	540	0								1.07		0.86	0	2					W. C. Hash.
Pikeville	Pike	634	14								1.48	−1.54	1.08	0	3					I. M. Williams.
Richmond	Madison	926	25	63.4	+ 5.0	87	13†	30	30	37	1.91	−0.91	0.82	0	5	22	3	6		J. W. Crooke.
Vanceburg	Lewis	525	3								2.16		1.12	0	3					Samuel Johnson.
Williamsburg	Whitley	939	22	60.7	+ 1.2	86	23	29	30	42	0.58	−1.97	0.28	0	4	16	14	1	s.	D. B. Bradley.
State averages and extremes				61.0		93	21	24	30	50	1.64		3.11	T.	4	21	5	6	s.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. ‡ Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

[*] Post-office address, Covington, Ky.

Daily Precipitation for October, 1920.

Stations	Day of month																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam ..... G.																										.80	.20	.65				1.65
Blandville ..... M.																								.27	.54	1.16						1.97
Calhoun ..... G.																									.20	.60	.12	.21	.03			1.16
Earlington ..... G.																									.09	.01	1.16		.04			1.30
Greenville ..... G.																									.04	.60	.30	.10				1.04
Henderson ‖ ..... O.																									.44		1.85	.09				2.38
Hopkinsville ..... C.																									.05	.25	.10	T				0.40
Marion ..... O.																									.43	1.75	T					2.18
Mayfield ..... M.																		T.						.15								0.15
Owensboro ..... O.																									.16	.44		.18				1.88
Paducah (Lone Oak) ..... O.																								.05	.68	3.11	.16		1.10			4.00
Paducah ..... O.																									.56	.06	2.30					2.92
Princeton ..... G.																								T	.18	1.73	.02	.01				1.94
Russellville ‖ ..... G.																																
Central Division.																																
Alpha ..... C.																		.67							.03	.93	1.17	T				2.80
Anchorage ..... O.																										.20	.95		.08			1.23
Bardstown ..... S.																									.05		.75	.95				1.75
Bowling Green ‖ ..... G.																			.07							.05	.68	.10	.13			1.07
Brownsville ‖ ..... G.	.04																								T.	T	.72		.13			0.85
Burnside ‖ ..... C.	T.																															
Camp Knox¶ ..... O.																			.40						T.	.02	1.66		.13			2.21
Carrollton ‖ (Lock No. 1) ..... O.																			.20						.04	.13	1.63	.04				2.04
Cloverport ‖ ..... O.	T.																								.05	.02	2.24	.02	.25			2.58
Eubank ..... C.																											.16	.75				0.91
Frankfort ‖ ..... K.	.05				T.																				.14	.12	1.28	.02	.02			1.63
Franklin ..... G.																									.02	.03	.67					0.72
Greensburg ..... G.	.09																								T.	.92	1.27	T	.25			2.53
High Bridge ..... K.	.03																								.27	.80	1.25	.02	.07			2.44
Irvington ..... O.																									.07	T.	.93	T	.13			1.13
Junction City ..... K.																									.14	.86	1.12	.05	.13	.02		2.32
Leitchfield ..... G.																									T.	*	1.10	.17				1.27
Lexington *** ..... K.	.03			.19												.01									.24	1.92	.34	.02				2.75
LOUISVILLE*** ..... O.	T														T.			.26							.02	1.08	.19	T.				1.55
Do. (Cherokee Park) ..... O.																			.45						.04		1.27					1.76
St. John ..... S.																		.01									1.13	.42				1.56
Scott ..... L.																									.18	.32	1.27					1.77
Shelbyville ..... S.																									.02	.10	.96					1.08
Taylorsville ..... S.																									.01	.04	.63	T.	.05			0.73
Williamstown ..... L.																									.31	.30	1.63	.03				2.27
Woodbury ‖ ..... G.	.01															.01											1.26	.03	.10			1.41
Eastern Division.																																
Ages ..... K.																											1.93					1.93
Ashland ..... O.	.09				T.																					.05	.72	.20				1.06
Beattyville ‡ ..... K.					T.																					.16	.67	.06	.11			1.00
Berea ..... K.																									.14	.26	.53	T.	.12			1.05
Cynthiana ‖ ..... L.	T.																							T.	.40	.30	1.70	T.				2.40
Falmouth ‖ ..... L.																									.27	.20	1.73	.04	T.			2.24
Farmers ‖ ..... L.	T.				T.																					.30	1.00					1.30
Jackson ‖ ..... K.																								.60		T	.90	T.	T.			1.50
London ‖ ..... C.																												.40	.20			0.60
Louisa ..... B.																										.04	.60	.12				0.76
Maysville ‖ ..... O.	T.					.10																			.18	.70	1.07	.08	T.			2.13
Middlesboro ..... C.	.04																										1.58		.11			1.73
Mount Sterling ..... L.																									.16	1.20	.73	T	T.			2.09
Oliver ‖ ..... O.																										.21	.86					1.07
Pikeville ‖ ..... B.																											1.08	.18	.22			1.48
Richmond ..... K.	.06					.17																			.17	.69	.82					1.91
Vanceburg ‖ ..... O.																										1.00	1.12	.04				2.16
Williamsburg ‖ ..... C.	.06																		T.							T.	.28	.06	.18			0.58

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

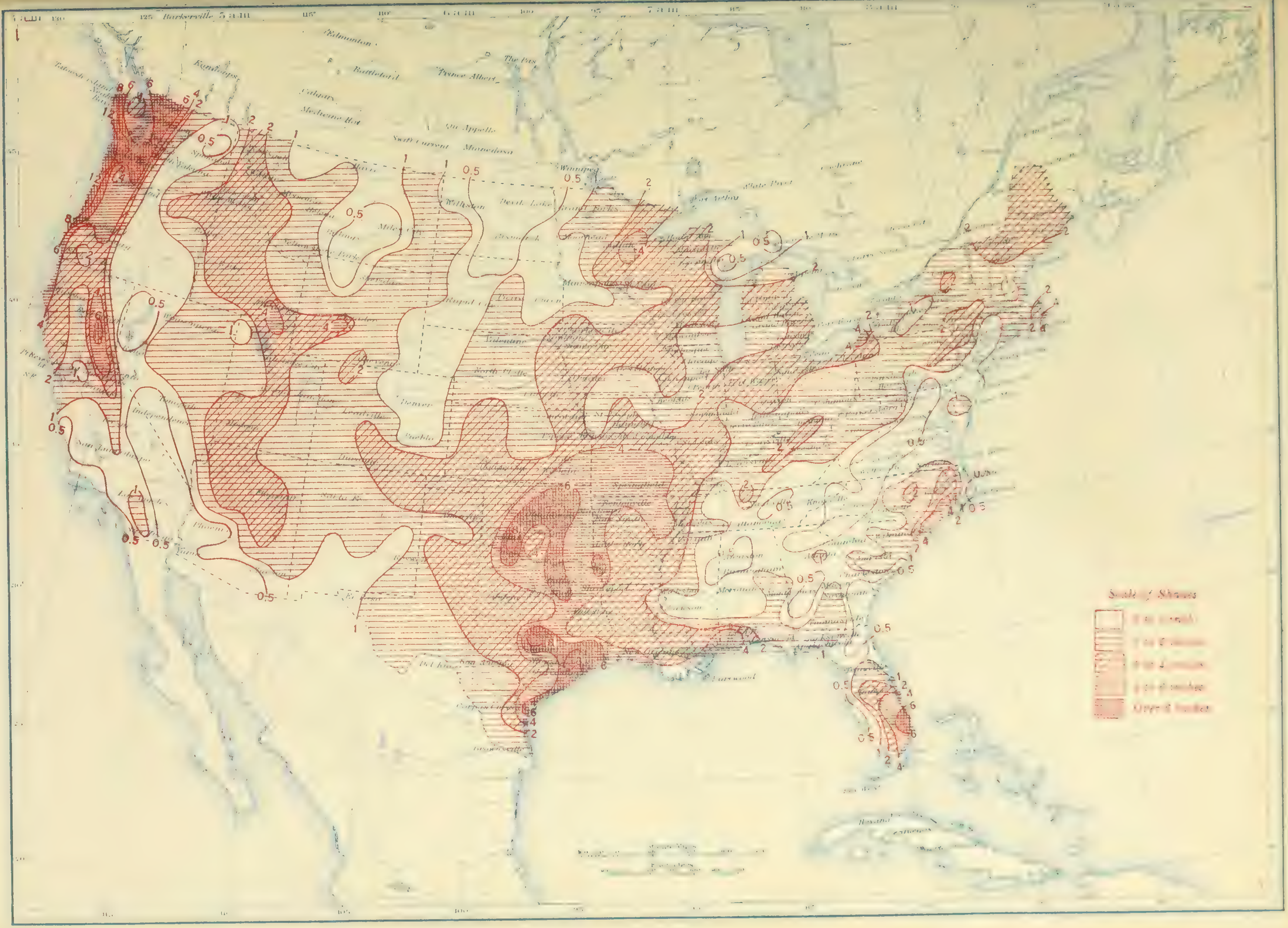
¶ Precipitation for 24 hours ending at 3 p. m.

Daily Temperatures for October, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	64	73	82	86	76	75	73	79	78	85	85	85	87	87	85	86	87	87	86	86	89	88	88	89	81	87	85	60	55	65	65	80.1
	Minimum	37	34	45	53	50	50	35	35	34	35	44	58	65	51	62	43	51	61	54	55	51	50	50	50	61	50	42	40	29	26	32	46.2
Blandville	Maximum	57	69	76	80	76	69	69	74	77	80	81	81	83	83	80	79	84	84	81	82	83	84	82	68	74	67	62	51	52	61	62	73.9
	Minimum	37	40	48	54	58	45	43	43	45	47	49	55	57	60	67	54	63	59	60	59	60	61	64	62	61	62	47	35	28	35	44	51.7
Calhoun	Maximum	62	72	83	86	81	77	72	80	85	86	87	87	88	86	84	86	86	86	84	84	88	81	85	75	80	74	68	52	65	65	65	78.7
	Minimum	37	33	43	50	52	45	40	36	37	40	43	44	46	49	60	53	54	59	53	55	51	49	51	54	60	59	48	35	28	28	32	45.9
Earlington	Maximum	62	70	79	84	77	68	70	78	81	84	85	84	85	85	83	84	85	87	84	84	86	85	83	82	78	72	64	55	50	62	64	76.8
	Minimum	37	33	42	52	50	41	36	35	37	41	45	49	50	53	61	56	55	66	54	54	52	50	53	57	61	62	45	33	26	26	50	47.0
Greenville	Maximum	61	71	79	84	75	68	70	..	..	85	85	85	86	86	85	85	85	81	85	85	88	88	85	82	77	72	69	55	52	64	64	[b]77.1
	Minimum	37	32	45	50	53	42	38	..	..	35	42	45	45	50	61	54	45	59	52	54	52	49	52	54	60	62	47	32	25	25	30	[b]45.8
Hopkinsville	Maximum	65	74	82	86	79	72	79	81	85	87	87	81	84	87	85	87	89	86	87	86	87	86	83	79	79	72	69	52	55	65	62	78.6
	Minimum	35	32	42	48	55	44	42	35	36	40	42	44	46	55	54	56	61	56	57	65	54	70	70	59	61	60	46	36	32	32	32	48.3
Marion	Maximum	61	70	79	84	75	68	70	78	82	83	83	82	84	85	84	82	84	85	84	85	85	85	85	75	78	70	63	58	53	62	62	76.3
	Minimum	36	40	51	57	52	45	40	48	50	49	59	61	61	62	65	58	60	65	62	60	62	65	64	65	60	62	47	35	28	35	45	53.2
Mayfield §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro	Maximum	46	67	78	81	79	69	69	74	79	81	82	83	84	85	86	85	85	84	84	84	84	86	85	75	78	73	64	50	50	60	63	75.3
	Minimum	40	36	47	64	54	47	44	39	40	45	52	50	51	54	63	60	55	60	57	58	55	53	54	57	61	64	49	35	29	30	44	49.9
Paducah (Lone Oak)	Maximum	60	63	71	74	78	71	76	77	81	86	88	89	86	88	81	86	91	92	85	83	75	74	70	65	62	74	66	56	50	52	56	74.4
	Minimum	44	45	50	54	57	46	45	44	45	50	52	63	58	61	70	62	69	66	60	65	60	58	55	52	50	62	51	40	36	38	40	53.2
Princeton	Maximum	63	73	81	87	79	72	74	80	84	86	87	86	88	87	85	85	88	90	87	87	89	89	87	76	78	73	64	60	55	65	64	79.0
	Minimum	35	32	43	49	56	46	40	36	38	40	42	44	45	49	57	51	57	58	53	52	53	50	53	58	61	62	49	40	26	26	32	46.2
Russellville §§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	57	69	80	83	72	68	72	77	81	84	84	84	86	86	85	83	86	87	84	85	86	87	88	79	76	68	66	51	47	60	64	76.3
	Minimum	35	32	40	49	41	37	33	33	33	39	41	42	44	46	56	56	47	53	54	54	56	48	49	50	57	61	45	36	26	24	29	43.4
Bardstown	Maximum	58	68	77	82	73	64	69	74	79	82	83	84	85	84	82	84	83	83	84	83	84	84	86	79	74	73	70	50	50	60	62	75.3
	Minimum	37	33	41	50	48	43	35	35	36	41	45	45	47	47	55	58	50	55	56	54	51	49	50	52	56	62	48	37	28	26	31	45.2
Bowling Green	Maximum	62	73	80	84	78	70	74	80	83	81	87	86	88	87	87	89	89	88	88	85	87	87	87	79	78	73	64	56	55	59	63	78.3
	Minimum	40	38	34	52	53	40	39	38	38	41	44	46	48	50	52	55	55	56	56	55	53	51	53	55	61	60	48	48	29	28	28	46.6
Camp Knox	Maximum	59	66	77	82	73	66	71	75	80	82	82	84	84	84	80	82	84	84	84	80	86	86	86	78	73	68	62	48	50	57	60	74.6
	Minimum	39	39	44	55	53	42	42	42	41	42	59	48	48	55	62	57	55	60	59	57	53	53	53	55	60	62	44	33	28	28	37	48.5
Eubank	Maximum	56	66	64	78	70	62	62	73	78	80	80	81	82	82	81	83	86	84	82	82	84	84	84	78	77	72	70	52	40	57	63	73.3
	Minimum	42	30	35	47	50	40	32	32	35	36	37	39	42	47	51	51	52	52	52	51	49	48	49	49	55	60	50	38	35	24	29	43.2
Frankfort	Maximum	56	65	75	80	79	61	66	71	75	78	80	80	82	82	80	80	80	81	81	81	82	82	83	79	74	79	70	53	47	55	63	73.5
	Minimum	42	37	40	50	48	45	38	36	38	41	42	44	45	47	54	63	50	54	55	54	52	51	52	51	59	62	52	41	32	30	33	46.4
Franklin	Maximum	64	72	82	85	78	70	74	80	85	87	88	88	89	89	86	85	85	88	88	91	89	88	89	81	82	78	71	57	56	65	61	79.7
	Minimum	34	37	42	44	46	50	40	42	44	45	42	51	54	56	58	59	60	63	62	56	53	53	52	58	62	63	41	35	27	28	38	48.2
Greensburg	Maximum	57	65	74	77	73	64	61	71	74	78	79	81	81	83	81	80	83	82	82	81	82	82	83	79	74	73	71	52	48	56	63	73.2
	Minimum	38	29	60	65	50	54	57	57	33	34	37	39	40	44	59	57	51	55	53	51	45	45	46	47	57	60	50	36	41	24	29	46.5
Irvington	Maximum	58	65	75	81	73	64	67	72	76	78	79	81	82	83	81	80	81	81	82	82	81	81	82	78	75	74	65	54	49	51	61	73.3
	Minimum	40	39	49	57	53	45	41	40	49	45	48	52	54	56	57	61	55	60	62	63	62	53	52	57	63	65	50	36	31	29	37	50.4
Junction City	Maximum	57	66	74	81	72	64	69	77	61	82	81	83	83	83	81	83	84	83	83	83	86	86	87	79	72	72	72	51	71	60	61	75.1
	Minimum	40	34	34	48	47	40	31	30	33	36	38	40	43	45	55	56	46	51	55	50	48	47	47	47	57	56	50	39	30	24	28	42.7
Leitchfield	Maximum	56	65	75	79	72	64	66	72	75	78	80	80	80	82	80	80	82	83	83	81	84	83	84	78	76	70	69	52	48	57	62	73.4
	Minimum	39	34	43	53	53	44	38	37	37	42	49	49	48	53	60	59	52	58	56	55	51	50	52	54	60	63	47	36	30	28	34	47.2
Lexington	Maximum	52	63	72	78	66	56	64	71	76	78	79	79	82	80	78	78	78	82	79	82	83	84	83	76	70	69	64	47	41	54	60	71.1
	Minimum	40	40	48	56	50	42	44	49	56	57	57	58	58	61	62	62	58	61	64	64	65	63	63	64	61	60	44	34	30	33	43	53.1
Louisville	Maximum	57	67	77	81	69	64	69	73	79	81	82	82	83	82	80	81	82	82	82	82	84	83	86	76	73	70	64	48	49	56	61	73.7
	Minimum	42	42	49	60	53	47	43	43	45	49	57	57	56	58	64	63	57	62	64	62	58	58	57	60	65	61	45	36	33	32	39	52.2
Do. (Cherokee Park)	Maximum	55	65	74	79	75	63	66	70	74	77	79	80	81	81	81	78	80	80	79	80	80	80	81	75	73	71	68	50	47	55	61	72.2
	Minimum	43	40	46	53	49	44	39	38	38	43	47	49	49	50	59	61	52	56	59	57	53	53	53	53	60	63	49	39	33	29	35	48.1
St. John	Maximum	60	67	72	85	73	74	68	75	81	82	83	84	83	85	81	84	85	84	85	81	86	85	85	78	74	71	69	64	58	58	60	76.1
	Minimum	36	32	40	48	42	45	38	36	35	39	44	44	44	47	56	57	51	57	55	54	50	50	51	53	59	50	41	31	29	26	30	44.2
Scott	Maximum	61	65	77	81	72	69	66	74	79	82	79	82	83	83	81	81	77	84	84	85	86	86	85	81	73	66	65	51	50	57	63	74.5
	Minimum	43	36	43	51	43	40	34	35	44	51	51	52	52	52	58	61	49	52	52	54	54	53	56	55	59	61	50	42	30	28	34	47.6
Shelbyville	Maximum	60	70	80	82	75	65	71	78	85	85	87	88	88	87	85	86	83	90	87	87	89	90	91	82	76	69	69	54	50	59	65	77.8
	Minimum	36	30	39	47	43	37	34	35	36	41	44	46	48	50	54	57	49	65	56	55	51	51	50	54	58	59	45	34	25	24	31	44.6
Taylorsville	Maximum	56	65	75	81	74	64	66	71	76	78	80	81	81	81	80	81	80	81	81	81	83	83	82	79	74	70	69	50	46	54	62	73.1
	Minimum	39	31	37	45	44	40	32	31	32	36	37	39	40	43	53	59	46	53	52	52	47	46	46	47	56	62	49	38	29	24	28	42.4
Williamstown	Maximum	54	65	75	79	73	62	66	72	76	79	81	80	83	82	82	79	78	82	82	83	84	84	83	79	71	66	65	51	46	54	63	72.9
	Minimum	39	37	44	55	49	40	39	41	45	51	51	53	51	51	54	61	52	55	60	58	59	57	58	55	60	60	48	39	31	29	35	48.9
Eastern Division.																																	
Ages	Maximum	55	68	63	69	69	65	68	65	64	78	67	70	67	69	68	69	69	67	72	72	71	73	73	71	68	69	69	60	47	60	64	67.1
	Minimum	45	39	36	43	54	43	38	38	40	42	44	44	45	44	47	49	54	51	54	53	52	49	52	52	51	53	49	40	34	29	30	45.0
Ashland	Maximum	52	66	77	82	81	76	67	73	80	81	84	88	85	85	83	83	81	82	84	85	81	84	83	84	76	69	73	58	47	58	66	75.9
	Minimum	46	40	40	52	53	42	38	38	39	42	44	44	45	46	47	53	50	50	52	52	52	52	52	51	55	56	57	40	34	28	31	45.8
Beattyville	Maximum	60	72	85	85	72	65	69	76	83	86	87	88	88	89	89	87	84	90	86	89	93	89	92	85	71	56	73	57	46	65	73	79.0
	Minimum	35	54	36	36	49	39	35	36	37	39	42	40	41	42	42	45	46	47	51	49	49	46	49	47	52	56	57	44	33	26	34	43.0
Berea	Maximum	56	68	76	81	72	63	70	77	77	84	85	85	87	84	84	84	86	85	85	85	87	87	88	..	65	73	70	57	53	62	70	[a]76.2
	Minimum	43	36	43	54	48	40	31	32	42	44	49	53	53	60	61	60	51	53	63	53	53	52	52	..	58	60	49	39	30	29	32	[a]47.4
Farmers	Maximum	60	62	65	75	76	80	77	78	80	78	80	77	65	66	70	73	79	80	82	80	77	72	76	74	76	70	70	50	50	55	62	71.5
	Minimum	45	45	45	31	30	30	31	30	31	38	30	36	38	39	38	40	41	43	45	43	44	46	50	45	50	60	41	40	30	26	30	39.1
Maysville	Maximum	55	63	73	78	68	61	63	68	72	77	80	79	80	80	81	78	77	79	81	80	81	80	81	80	74	65	68	53	45	53	62	71.5
	Minimum	44	37	40	51	46	42	40	41	41	45	44	46	47	44	52	59	50	52	57	54	54	53	54	54	59	60	53	42	32	30	32	46.9
Middlesboro	Maximum	58	67	73	75	75	68	67	70	77	78	79	80	80	80	80	82	82	79	80	82	83	82	84	80	72	77	73	61	52	60	61	74.1
	Minimum	44	35	37	43	50	40	37	37	39	41	43	42	44	46	45	46	50	51	51	52	58	47	47	47	52	51	61	40	34	27	27	44.0
Mount Sterling	Maximum	59	61	67	77	69	60	64	72	77	79	81	82	83	83	81	81	80	83	83	83	84	82	83	82	71	71	71	52	48	54	64	73.1
	Minimum	42	35	37	53	47	41	30	33	36	45	40	47	44	48	49	55	48	50	55	53	52	51	52	54	59	59	48	48	29	27	30	45.1
Richmond	Maximum	56	68	76	81	73	68	70	75	79	82	84	85	87	85	83	84	86	87	82	86	86	86	86	81	72	72	71	60	45	58	65	76.1
	Minimum	42	38	46	56	51	41	37	40	42	50	51	53	55	54	60	60	58	60	60	57	57	66	57	59	61	60	60	42	32	30	40	50.8
Williamsburg	Maximum	59	67	75	79	76	68	68	74	77	80	84	84	84	83	81	83	83	84	83	83	85	84	86	82	71	78	74	56	53	60	64	75.7
	Minimum	43	37	39	46	52	40	37	38	38	40	42	46	46	49	48	55	55	53	54	53	49	49	49	50	55	62	55	42	34	29	31	45.7

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

[a] [b] [c] etc. indicate respectively 1, 2, 3, etc., days missing from record.

Scale of Showers
0 to 1 inch
1 to 2 inches
2 to 4 inches
4 to 6 inches
Over 6 inches
Barkerville
Edmonton
Battleford
Prince Albert
The Pas
Kamloops
Calgary
Medicine Hat
Qu'Appelle
Swift Current
Minnedosa
Winnipeg
Port Arthur
Williston
Devils Lake
Grand Forks
Miles City
Rapid City
Valentine
North Platte
Denver
Pueblo
Leadville
Independence
Phoenix
Yuma
El Paso
Del Rio
San Antonio
Corpus Christi
Brownsville
Springfield
Bentonville
New Orleans
Jackson
Key West
Havana
0.5
1
2
4
6
8
12

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WEATHER BUREAU
CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

KENTUCKY SECTION

NOVEMBER, 1920.

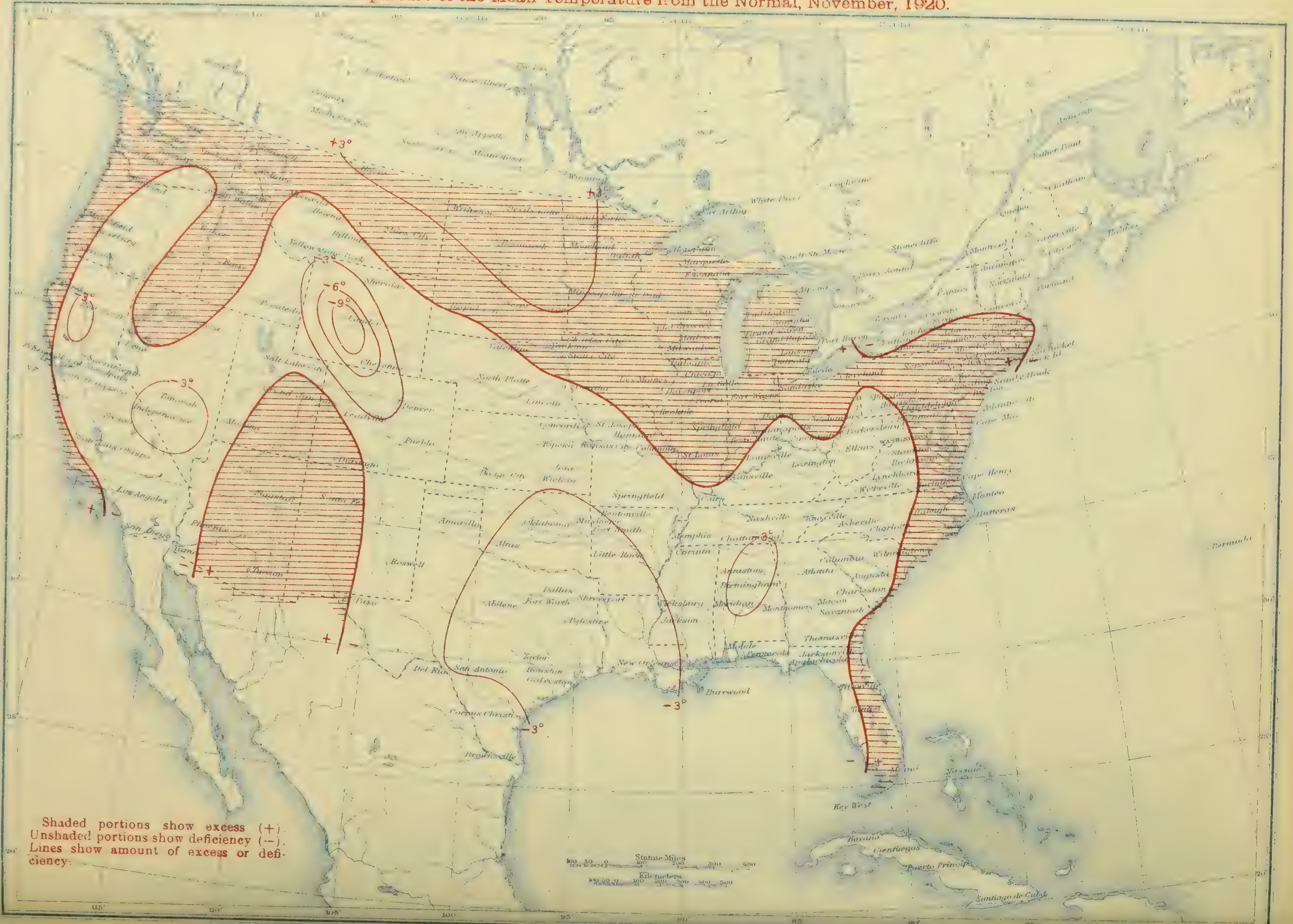
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
DECEMBER 31, 1920.

Departure of the Mean Temperature from the Normal, November, 1920.



Shaded portions show excess (+).
Unshaded portions show deficiency (−).
Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

Vol. XXV. Louisville, Ky., November, 1920. No. 11

GENERAL SUMMARY.

Weather conditions during the month were favorable for gathering corn and for other outdoor work, but were not entirely favorable for growth of fall grains. Soil moisture was deficient in the western and southern counties at the beginning of the month, and the light showers during the first three weeks were not sufficient to relieve this condition. A moderate to heavy fall of snow over the eastern half of the State in the period 15-17th furnished much needed moisture in that district. Moderate to heavy precipitation occurred in all parts of the State, except the extreme western counties, on the 22-23d, relieving the shortage of stock water in the upland and hilly regions in the central and eastern counties. Some late sown wheat did not germinate until these rains. Pastures on south slopes revived to some extent, but the season was too late for much growth of grass. A large acreage of rye, sown early as a cover crop, furnished excellent pasturage.

Temperatures above normal favored the growth of wheat during the first decade, but development was checked by the low temperatures and hard freezes that followed. The retarding effect of the dry, cold weather on the growth of wheat was the more important because the crop was sown late this year to avoid injury by the Hessian fly. Although the plants grew slowly and remained small, the stand was good and the crop looked well in most localities at the end of the month. Progress in husking and cribbing corn was rapid, with the grain unusually dry and in fine condition for storage. It was estimated that three-fourths of the corn crop had been gathered at the close of the month. The quality of this crop is particularly fine, due to the long period of dry weather in October and November. Several days with showers during the last decade permitted the handling of tobacco, otherwise but little stripping was possible.

TEMPERATURE.

The average temperature for the State, 38 stations reporting, was 44.7°, which is 1.4° below normal. Mild weather, with maximum temperatures above 60° almost daily, prevailed during the first decade. This was followed by about ten days of abnormally cold weather, minimum temperatures registering in the twenties on most days and ranging from 10° to 20° on the 13th and 14th. A change to warmer, with maximum temperatures again above 60°, occurred on the 19th and continued for a few days; but temperatures below normal predominated during the last decade. The extremes at the various stations were 79° at Ashland and Beaver Dam on the 7th, and 10° at Anchorage on the 13th.

PRECIPITATION.

The average precipitation for the State, based on the reports of 57 stations, was 2.21 inches, which is 1.14 inches less than normal for November. Good rains occurred on the 22-23d, and light to moderate showers in the periods 1st-2d, 9-10th, 27-30th. The snow of the 15-17th ranged from one inch near the longitude of Louisville to eight inches or more in the mountains, the depth increasing rapidly toward the eastward. Only flurries occurred in the western counties. Precipitation for the month was near four inches in the southeastern mountain region. In the central and northern counties amounts ranged generally between 1.5 and 3.0 inches, decreasing toward the westward to less than 1.0 inch near the Mississippi River. Over more than one-third of the State, including the western counties and a broad belt extending eastward to the blue grass region, monthly amounts were generally less than half the normal for November, and much less than necessary for fall grains and stock water. Amounts at the various stations ranged between 0.92 inch at Blandville and 4.63 inches at Middlesboro. Thunderstorms were reported from some stations on the 21st.

MISCELLANEOUS

The Ohio was low and navigation impeded until the 23d, when heavy rains over the upper basin caused a moderate rise that produced good stages during the remainder of the month.

ERRATA: September, 1920. Leitchfield, mean minimum should be 60.9 and monthly mean 70.4

PRESSURE AND WIND.

Stations.	Atmospheric Pressure. (In inches reduced to sea level.)					Wind.				
	Average.	Highest.	Date.	Lowest.	Date.	Total movement	Av. hourly velocity	Max. Velocity.* Miles per hour	Max. Velocity.* Direction.	Max. Velocity.* Date.
Cairo .... Ill.	30.19	30.68	13	29.73	21	6421	8.9	33	n.	12
Cincinnati .... Ohio	30.17	30.64	13	29.57	22	5368	7.5	24	w.	2
Evansville....... Ind.	30.20	30.68	13	29.72	21	7605	10.6	29	nw.	11
Lexington .... Ky.	30.19	30.66	13	29.64	22	9191	12.8	35	w.	2
Louisville .... Ky.	30.19	30.68	13	29.65	22	8597	11.9	36	nw.	11

*For any five minute period.

HUMIDITY AND SUNSHINE.

Stations.	Rel. Humidity.			Sunshine.				
	7 a. m.	Noon.	7 p. m.	Total hours of Sunshine.	No. of hours possible.	Percentage of possible.	Number of days with 80 per cent or more	Number of days with 20 per cent or less.
Cairo .... Ill.	79	60	61	159.7	305.6	52	13	12
Cincinnati .... Ohio.	81	62	72	111.6	301.5	37	7	16
Evansville.......... Ind.	76	57	64	163.9	303.7	54	11	11
Lexington .... Ky.	79	64	......	127.5	303.7	42	7	13
Louisville .... Ky.	75	61	64	145.3	303.7	48	12	14

COMPARATIVE DATA FOR NOVEMBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30-year normal.	Highest.	Lowest.	Monthly average.	Departure from 30-year normal	No. of days with .01 or more rain
1889	43.1	−3.0	85	10	6.04	+2.69	..
1890	48.6	+2.5	81	19	4.87	+1.52	..
1891	43.5	−2.6	75	10	6.04	+2.69	..
1892	42.8	−3.3	78	9	3.85	+0.50	..
1893	44.3	−1.8	79	−2	3.12	−0.23	..
1894	43.3	−2.8	80	8	1.32	−2.03	4
1895	45.8	−0.3	85	16	4.29	+0.94	7
1896	49.3	+3.2	80	11	5.01	+1.66	8
1897	47.8	+1.7	78	12	4.69	+1.34	10
1898	43.2	−2.9	80	10	2.79	−0.56	8
1899	49.8	+3.7	79	20	2.12	−1.23	8
1900	47.0	+0.9	83	15	7.78	+4.43	8
1901	41.8	−4.3	82	11	1.52	−1.83	4
1902	53.4	+7.3	90	20	4.42	+1.07	11
1903	42.5	−3.6	81	5	3.01	−0.34	8
1904	44.7	−1.4	79	14	0.89	−2.46	3
1905	46.4	+0.3	79	14	3.55	+0.20	7
1906	46.1	0.0	93	11	5.02	+1.67	7
1907	44.2	−1.9	75	15	3.49	+0.14	7
1908	48.6	+2.5	80	8	2.61	−0.74	7
1909	54.7	+8.6	86	19	2.29	−1.06	6
1910	41.1	−5.0	78	11	2.04	−1.31	6
1911	41.6	−4.5	85	9	4.51	+1.16	8
1912	45.2	−0.9	82	10	1.22	−2.13	4
1913	50.5	+4.4	81	8	3.25	−0.10	9
1914	46.9	+0.8	83	5	1.23	−2.12	5
1915	49.8	+3.7	85	16	4.80	+1.45	9
1916	47.8	+1.7	83	8	1.52	−1.83	4
1917	44.3	−1.8	78	11	1.23	−2.12	5
1918	46.1	0.0	77	19	1.90	−1.45	6
1919	47.4	+1.3	78	16	7.31	+3.96	9
1920	44.7	−1.4	79	10	2.21	−1.14	8

Climatological Data for November, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	47.8	+1.5	79	7	14	13	46	1.15	-1.71	0.70	0.2	4	16	12	2	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	45.0	-1.6	74	6	15	13	32	0.92	-3.15	0.35	0	6	13	3	14	se.	E. W. Horr.
Calhoun	McLean	437	16	44.6	-3.8	75	6	15	13	42	1.94	-1.17	0.66	T.	7	12	6	12	nw.	W. A. Taylor.
Earlington	Hopkins	420	29	45.1	-2.8	74	6	12	13	42	1.55	-2.19	0.80	0	5	17	0	13	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	45.3		76	6	13	13	44	1.06		0.62	0	4	16	6	8	n.	C. R. Lovell.
Henderson	Henderson	327	12								1.35	-2.39	0.35	0	5					W. W. Shelby.
Hopkinsville	Christian	524	23	46.6	-1.7	77	6	18	14	44	1.81	-2.34	0.50	0	7	12	1	17	w.	W. E. Graves.
Marion	Crittenden	571	21	45.7	-2.6	73	6	13	13	33	1.23	-2.49	0.70	0	3	12	5	13	s.	B. C. Paris.
Mayfield	Graves	361	10								1.41	-2.79	0.40	0	7	19^{d}	3^{d}	4^{d}	s.	N. E. Douthit.
Owensboro	Daviess	479	23	44.7	-2.8	70	7†	18	13	34	2.16	-1.29	0.82	T.	7	11	5	14	nw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	43.8		72	21	15	13	27	1.14		0.36	T.	7	12	1	17	n.	E. Futrell, Jr.
Paducah	McCracken	341	31								0.98	-2.82	0.36	0	5					Frank L. Brown.
Princeton	Caldwell	529	10	45.8	-0.9	76	6	16	13	43	1.64	-2.48	0.52	T.	7	11	6	13	s.	Dr. W. L. Cash.
Russellville	Logan	590	6																	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25								2.78	-0.95	1.10	1.2	5	13	10	7	nw.	Frank Hicks.
Anchorage	Jefferson	700	19	42.8	-1.5	74	6	10	13	40	3.56	+0.61	2.17	4.0	9	10	2	18	sw.	C. E. Barret.
Bardstown	Nelson	637	23	44.8	-2.2	74	6	14	14	41	1.68	-1.70	0.76	1.4	7	15	1	14	w.	Chas. M. Talbott.
Bowling Green	Warren	500	29	47.6	+0.3	78	6†	16	13	44	1.90	-1.71	0.85	T.	4	13	7	10	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2								1.78		0.70	T.	7					James H. Young.
Burnside	Pulaski	773	27								2.43	-0.78	0.78	2.0	9					F. E. Bradshaw.
Camp Knox	Hardin	736	0	43.7		72	6†	14	13	33	2.50		1.13	1.0	8	14	0	16	sw.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21								2.53	-0.40	1.35		7					Charlie Oliver.
Cloverport	Breckenridge	375	6								2.38		0.80	0.3	9					W. A. Cockerill.
Eubank	Pulaski	1177	25	44.2	-0.3	73	6†	13	14	41	2.06	-0.97	0.67	2.0	5	11	3	16	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	44.8	-1.4	68	1†	15	14	33	1.70	-1.71	0.80	4.0	8	9	2	19	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	47.7	-0.8	78	6	16	13	41	2.53	-1.00	0.70	T.	7	12	5	13	n.	B. V. Hunt.
Greensburg	Green	581	27	43.0	-1.7	73	7	13	14	44	2.17	-1.24	0.70	0.5	12	9	5	16	s.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17								1.45	-1.26	0.52	2.5	8					Miss Lulu Wood.
Irvington	Breckenridge	646	22	44.8	-1.9	70	7	17	13	30	2.60	-0.61	1.45	0.2	6	15	1	14	w.	W. J. Piggott.
Junction City	Boyle	985	26	44.6	+2.0	74	6	13	14	43	2.33	-0.81	0.65	3.0	11	14	6	10	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	44.7	-1.6	72	7	16	13	34	1.87	-2.06	0.74	0.5	6	14	2	14	sw.	John E. Stone.
Lexington	Fayette	989	32	43.3	-1.4	71	6	18	13	28	2.22	-1.26	0.68	5.0	9	9	6	15	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	44.8	-1.5	70	6	21	14	26	3.35	-0.83	2.36	1.5	10	13	2	15	w.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	44.8	-1.8	68	6†	16	13†	32	3.20	+0.77	2.09	2.2	7	13	3	14	s.	Wm. I. Hunt.
St. John	Hardin	777	23	43.7	-1.7	74	6	11	14	38	1.89	-1.59	0.73	1.0	8	19	2	9		Sisters of Loretto.
Scott •	Kenton	900	22	43.6	-1.4	68	6	12	13	33	2.67	-0.13	1.00	5.0	9	6	6	18	s.	E. B. Wilson.
Shelbyville	Shelby	825	31	42.8	-1.6	76	6	11	13	41	2.66	-0.75	0.98	6.0	9	13	1	16	s.	F. A. Miller.
Taylorsville	Spencer	489	17	43.0	-1.9	70	7	11	13	38	1.94	-1.16	0.90	3.0	9	14	0	16	s.	E. D. Bourne.
Williamstown	Grant	943	17	43.2	-1.9	68	6	14	13	29	2.18	-0.16	0.82	8.9	8	9	7	14	nw.	Mrs. E. S. Humlong.
Woodbury	Butler	533	2								1.46		0.58	T.	6					J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	^{b}43.8		67^{b}	1†	13^{b}	18	30^{b}	3.83			4.0	11	8	6	16		S. A. Driver.
Ashland	Boyd	534	13	45.4		79	7	15	13	36	2.14		0.68	6.0	12	8	3	19	w.	Forester Farley.
Beattyville	Lee	650	16	45.4	+1.3	78	6†	12	13†	49	3.16	+0.41	0.74	6.6	11	7	8	15	w.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	45.5	-1.7	77	6	11	13	45	2.70	-0.20	0.60	4.5	9	9	5	16	sw.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2								1.80		1.00	4.0	5					P. H. Kehoe.
Falmouth	Pendleton	600	31								1.73	-1.44	0.78	3.0	5	10	5	15	s.	J. V. Oldham.
Farmers	Rowan	668	12								1.70	-1.13	0.80	5.0	3	13	7	10	e.	Miss Avis Norman.
Jackson	Breathitt	776	8								2.77	+0.09	0.95	8.0	7					Nick Kelly.
London	Laurel	1190	5								2.18		0.70	5.5	8					C. R. Lee.
Louisa	Lawrence	584	16								2.45	-0.30	0.82		8					T. D. Snyder.
Maysville	Mason	524	22	43.8	-0.8	68	1	16	14	30	2.10	-0.74	0.66	8.0	8	16	0	14	w.	Harry M. Robinson.
Middlesboro	Bell	1128	21	43.8	-2.0	73	6	16	14	45	4.63	+1.12	1.07	10.0	12	10	15	5		B. H. Perkins.
Mount Sterling	Montgomery	930	30	43.4	-0.6	72	7	13	13†	36	2.46	-0.78	0.67	6.0	9	16	3	11	w.	W. R. McKee.
Oliver	Greenup	540	0								2.69		1.17	9.0	12					W. C. Hash.
Pikeville	Pike	634	14								4.10	+1.43	1.12	6.0	9					I. M. Williams.
Richmond	Madison	926	25	46.6	-0.2	74	7	16	13	36	2.58	-0.29	0.73	3.0	8	10	4	16		J. W. Crooke.
Vanceburg	Lewis	525	3								2.01		0.50	5.0	9					Samuel Johnson.
Williamsburg	Whitley	939	22	45.4	-1.7	76	6	15	13†	45	2.85	-0.08	0.98	8.0	7	8	10	12	w.	D. B. Bradley.
State averages and extremes				44.7		79	7	10	13	49	2.21		2.36	2.8	8	12	5	13	w.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ^{a}, ^{b}, ^{c}, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

• Post-office address, Covington, Ky.

Daily Precipitation for November, 1920.

Stations.	Day of month.																															Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Western Division.																																
Beaver Dam G	.24								.20						.01												.70					[illegible]
Blandville M	.35								[illegible]												.06	T				.06			[illegible]	.05		[illegible]
Calhoun G	.32	.66						.01	.22						T	T						[illegible]	T.				[illegible]		T	.14		[illegible]
Earlington G		.80							[illegible]	.11												[illegible]					.12			[illegible]		[illegible]
Greenville G	.20	.62							.06													.18										1.66
Henderson ‖ O	.25	.20							.25													[illegible]				T				[illegible]		1.35
Hopkinsville C	.37	.31							.31													.50	.03				.17		T	[illegible]		[illegible]
Marion O	.28								.25													[illegible]					T					[illegible]
Mayfield M	.40	.20							[illegible]													.20				.10	[illegible]	[illegible]				1.41
Owensboro O	.40	.61						.05	.07							T					.82						.11	T	[illegible]			2.16
Paducah (Lone Oak) O	.36								.16						T							.22	[illegible]		T		[illegible]	T	.09	[illegible]		1.14
Paducah O	T	.30							.08	T.												.36	T				.06			.18		0.98
Princeton G	.41	.30							.07						T						T.	.52					[illegible]		.06	[illegible]		1.64
Russellville ‖ G																																
Central Division.																																
Alpha C									T						1.10	.12						.66					.56		.40			2.78
Anchorage O	.13	.53						.06	.11							.08	.13					2.17					[illegible]			.27		3.56
Bardstown S		.30							.22							.04	.11					.76					.12			.13		1.68
Bowling Green G		.65								.85							T.						.30				[illegible]			T.		1.90
Brownsville G		.70							.03	.16							T.					.63	.65					.14		.07		1.78
Burnside C		.30							T	.15					.04	.02	.04					.78	[illegible]					.72		.30		2.43
Camp Knox¶ O	.28	.67						.14	T.							T	.09					1.05	[illegible]		T.	T.	[illegible]	T.		.10		2.50
Carrollton (Lock No. 1) O		.42							.03	.07							.31					1.35	.15							.20		[illegible]
Cloverport O	T.	.32							.80	.11							.03					.79	[illegible]				.12	.01		.15		2.38
Eubank C		.67								.15					T	T.	.18					.48						.51				2.06
Frankfort K	T.	.22							.14	.04							.22					.80	.05			T	.05			.18		1.70
Franklin G	.45	.36							.70	.03							T.					.57					.30			.12		2.53
Greensburg G	.06	.26							.16	.05					.03	.10	.06					.70			T	[illegible]	.12	.34		.28		2.17
High Bridge K		.30							.12	.07							.25					.52	.03				.67			.19		1.45
Irvington O	.18	.58						T.	.19							T	.10					1.45	T		T		.10		T	T.		2.60
Junction City K	T.	.43	.02						.18							.28	.05					.65			.02		.18	.15	.02	.35		2.33
Leitchfield G	.74								.37							.05						.54					.12		.05			1.87
Lexington *** K	.04	.17					T	.01	.08						T.	.30	.27					.68	T		T.		.08			[illegible]		2.22
LOUISVILLE*** O	.11	.54						.05	.12							.02	T.				1.46	.90			T	T.	[illegible]		.09	.01		3.35
Do. (Cherokee Park) O	.13	.47							.15								.10					2.09					.09			.17		3.20
St. John S	.70							.01	.15							T.	.05					.73	.02		T		.13			.10		1.89
Scott L	.04	.46					T.		.06			T.			T.	.20	.30					1.00	.17		T.		.04			.40		2.67
Shelbyville ‖ S	.09	.32							.17							.10	.58					.98	.03				.10			.29		2.66
Taylorsville ‖ S	.02	.26							.19						T.	.07	.20					.90	T		T	.01	.12			.17		1.94
Williamstown L	T.	.31						.01	.13	T.						.20	.21					.82			T		.04			.46		2.18
Woodbury ‖ G		.57							.01	.12							T.					.58					.11			.07		1.46
Eastern Division.																																
Ages K		.76							.12	.41	.05	T.				*	1.15					.21	.06				.28	.72		.07		3.83
Ashland ‖ O		.08	.10						.18	.02		T.			.03	.12	.68					.31	.44	.03			.03	.12				2.14
Beattyville ‖ K		.19	.11						.01	.34			T.		.14	.60	.38	.06				.50	.09			T	T	.74		T		3.16
Berea K		.24							.34						.03	.35	.05					.54			T.		.40	.15		.60		2.70
Cynthiana ‖ L		.20	T.						.05	T						T.	.40	T.				1.00	T			T			T.	.15		1.80
Falmouth L	.02	T.							.20	T							.38					.78								.35		1.73
Farmers L										.50							.40						.80					T				1.70
Jackson ‖ K		.09	T.						T.	.40					T.	.08	.55	.30	.10			.30	T				T.	.95		T.		2.77
London ‖ C		.21													.05	.30	.25					.45						.70	.12	.10		2.18
Louisa ‖ B		.07							.32	.08					.10	.08	.82					.35						.63				2.45
Maysville ‖ O		.30	.07					.08	T							T.	.66					.48	.30	T.			.08	T		.13		2.10
Middlesboro C		.73							.08	.25					.20	.70	.10	.82				.66	.05				.35	1.07		.22		4.63
Mount Sterling L		.35						T.	.13	.11					T.	.30	.21					.67	T.		.03		.11	T		.55		2.46
Oliver ‖ O		.26	.12					.16	.20	T.					T.	.19	1.17	.04				.21	.26	.03			.03	.02				2.69
Pikeville ‖ B		.08	.52							.32					.32	.54	.62	T.				.42	.16					1.12				4.10
Richmond K	T.	.40							.20						.10	.30						.55				.10	.20		.73			2.58
Vanceburg ‖ O		.28	.05						.19			T.					.43					.50	.48	.02		.03	.03					2.01
Williamsburg ‖ C			.34						T.	.69	T.				T.	.49						.18	.11					.98	T	.06		2.85

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning: amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

¶ Precipitation for 24 hours ending at 3 p. m

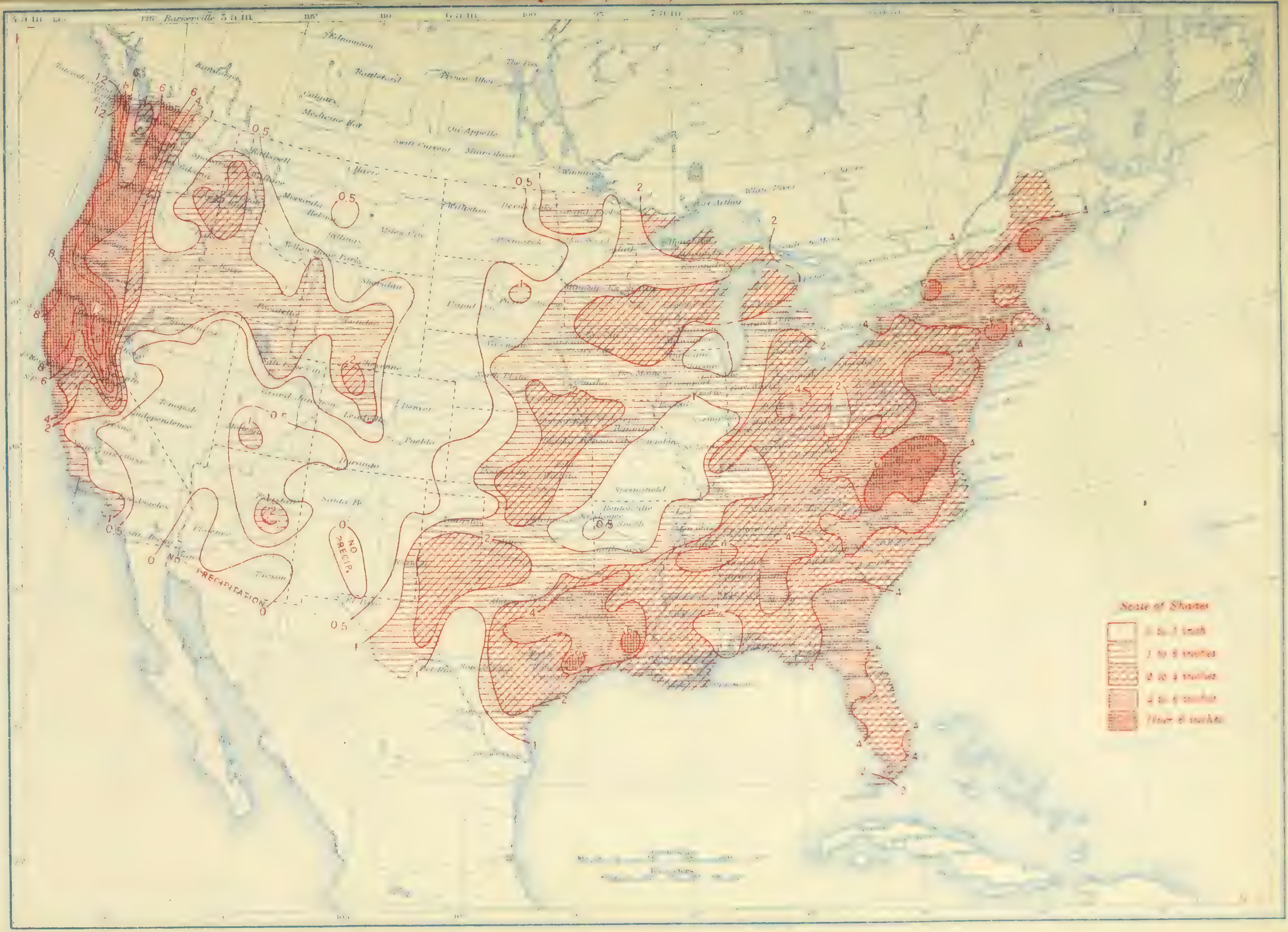
Daily Temperatures for November, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	62	61	63	73	70	76	79	72	66	70	60	38	43	43	38	37	37	69	72	68	67	65	64	65	66	48	49	60	57	68	..	60.2
	Minimum	49	48	30	31	30	34	40	55	56	46	24	24	14	16	31	24	23	23	39	51	50	48	47	30	31	33	36	33	29	38	..	35.4
Blandville	Maximum	63	61	57	70	67	74	69	69	65	57	49	32	33	41	40	40	45	59	66	71	64	59	50	56	42	42	48	42	50	50	..	54.4
	Minimum	50	36	33	38	42	44	47	52	55	40	29	22	15	22	32	23	19	29	37	42	54	41	29	38	32	25	36	31	40	36	..	35.6
Calhoun	Maximum	59	60	60	70	68	75	73	68	63	60	50	38	35	38	39	35	44	58	67	69	69	68	44	54	49	42	45	57	58	57	..	55.7
	Minimum	49	37	30	30	31	33	39	55	56	38	29	22	15	17	31	27	23	29	29	35	38	35	36	33	31	35	36	32	35	35	..	33.4
Earlington	Maximum	60	60	57	69	66	74	73	70	66	54	48	33	35	41	40	37	43	57	66	69	66	62	44	55	41	44	45	54	57	55	..	54.7
	Minimum	52	39	30	34	31	32	43	56	54	39	28	22	12	16	31	22	33	34	36	46	55	38	36	35	33	35	36	34	38	34	..	35.5
Greenville	Maximum	60	63	59	70	68	76	74	70	66	60	51	39	31	40	42	37	45	57	66	71	68	63	44	56	51	44	47	56	57	57	..	56.3
	Minimum	51	37	29	32	33	32	41	55	55	37	28	22	13	15	30	26	20	30	31	41	51	37	35	35	29	34	35	35	42	34	..	34.2
Hopkinsville	Maximum	59	62	61	72	69	77	74	71	68	62	54	44	38	42	43	39	46	60	68	72	68	64	52	55	59	49	48	52	56	57	..	58.0
	Minimum	49	40	28	29	32	33	38	56	58	41	32	24	25	18	31	27	20	29	30	35	47	39	37	36	31	33	36	37	44	38	..	35.1
Marion	Maximum	59	61	56	69	62	73	70	66	62	59	47	35	36	38	40	39	44	58	66	70	65	62	51	56	45	56	51	45	55	53	..	55.0
	Minimum	50	31	33	40	40	40	58	55	58	38	29	20	13	20	32	25	20	33	38	45	54	38	36	38	32	31	36	34	37	37	..	36.4
Mayfield	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Owensboro	Maximum	58	58	54	69	67	68	70	65	67	63	46	31	32	42	39	37	42	56	60	70	67	46	44	51	44	42	45	56	53	55	..	53.2
	Minimum	52	39	32	35	34	38	54	45	57	40	31	22	18	23	27	27	25	32	38	40	46	44	37	35	34	36	38	35	37	35	..	36.2
Paducah (Lone Oak)	Maximum	51	53	56	57	65	68	70	64	65	55	48	46	29	36	34	35	39	48	58	66	72	69	56	60	54	44	45	45	47	50	..	52.8
	Minimum	36	35	38	40	38	42	49	52	50	36	30	22	15	25	25	22	21	32	40	44	46	40	32	35	33	25	36	31	35	39	..	34.8
Princeton	Maximum	61	61	60	73	72	76	73	70	66	58	52	37	39	43	41	43	46	61	69	73	67	60	53	58	47	48	46	55	57	57	..	57.4
	Minimum	48	39	29	30	32	34	39	56	56	40	30	23	16	17	31	26	19	28	29	39	52	39	36	35	31	29	37	34	36	34	..	34.1
Russellville§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	63	61	55	68	67	74	70	66	63	58	49	35	37	44	39	32	39	46	66	69	66	63	40	52	40	40	44	55	52	50	..	53.4
	Minimum	45	39	33	30	28	34	45	55	54	32	25	18	10	12	28	26	20	21	29	38	47	36	34	32	25	34	32	34	34	32	..	32.1
Bardstown	Maximum	69	62	59	69	64	74	73	68	64	61	48	40	37	40	38	35	42	55	66	69	68	61	42	55	47	46	47	55	53	52	..	55.3
	Minimum	48	41	30	30	31	33	42	54	54	36	28	25	15	14	30	29	25	27	34	38	45	38	36	36	31	29	35	39	37	41	..	34.4
Bowling Green	Maximum	68	66	60	68	76	78	77	73	70	68	52	50	45	43	41	38	56	58	68	72	78	67	65	58	52	50	46	58	54	58	..	60.4
	Minimum	40	44	31	32	32	34	42	56	45	41	34	26	16	20	34	30	23	27	31	31	44	40	37	39	31	31	37	39	41	38	..	34.9
Camp Knox	Maximum	63	59	55	66	66	72	72	64	63	46	50	34	36	39	39	32	41	55	66	68	64	55	41	52	39	41	45	55	52	50	..	52.7
	Minimum	52	37	34	34	34	39	33	48	45	36	32	21	14	19	30	26	25	28	36	43	50	34	34	34	30	36	34	34	41	37	..	34.7
Eubank	Maximum	70	63	55	63	67	73	73	70	69	60	48	44	34	45	43	35	38	57	62	65	68	61	39	52	47	44	42	48	55	51	..	54.7
	Minimum	48	45	28	28	30	32	41	50	53	40	28	34	15	13	32	27	25	18	31	37	40	36	34	32	28	34	34	39	34	42	..	33.7
Frankfort	Maximum	68	65	54	64	63	67	68	65	64	61	48	44	35	41	39	38	37	50	62	65	67	65	42	51	49	41	47	53	55	55	..	54 1
	Minimum	47	44	40	33	33	34	41	54	55	40	30	25	17	15	33	30	27	25	30	35	41	40	37	36	31	36	35	40	37	45	..	35.5
Franklin	Maximum	66	63	60	73	71	78	75	72	66	63	55	47	40	43	45	41	45	60	69	71	72	69	45	57	52	53	45	53	56	58	..	58.8
	Minimum	52	43	33	36	39	37	46	56	40	41	35	24	16	20	33	30	23	30	35	40	47	38	37	37	31	35	38	40	44	41	..	36.6
Greensburg	Maximum	71	62	55	69	63	72	73	69	64	62	45	35	35	42	40	37	43	55	64	68	69	46	45	55	47	47	44	54	52	52	..	54.5
	Minimum	45	44	28	25	28	30	34	53	55	30	25	25	15	13	32	28	23	20	24	29	35	36	35	32	29	35	29	38	30	39	..	31.5
Irvington	Maximum	61	61	53	65	61	69	70	65	63	55	47	33	33	39	40	33	41	54	63	67	65	63	42	52	42	43	45	54	53	53	..	52.8
	Minimum	51	40	33	36	35	39	46	55	55	39	30	23	17	18	28	28	26	31	38	44	53	38	36	36	34	37	35	36	45	41	..	36.8
Junction City	Maximum	72	70	63	64	65	74	72	67	65	62	50	42	35	44	42	38	40	53	63	67	69	65	49	52	47	44	44	53	55	52	..	55.9
	Minimum	49	51	29	27	29	31	35	53	49	39	29	24	14	13	32	27	25	17	31	36	38	36	35	34	35	34	34	39	34	40	..	33 3
Leitchfield	Maximum	61	60	55	66	64	70	72	67	65	60	48	42	35	38	36	36	41	54	63	66	67	64	48	53	46	42	47	55	50	50	..	54.0
	Minimum	51	40	31	32	33	38	45	55	55	39	30	23	16	17	32	29	23	28	34	41	49	35	35	35	31	35	35	36	39	40	..	35.4
Lexington	Maximum	67	60	51	61	59	71	66	60	61	44	46	30	31	38	37	31	35	48	60	64	65	56	37	49	37	38	44	53	56	48	..	50.1
	Minimum	51	38	37	39	46	43	52	53	44	38	29	22	18	25	31	25	24	29	38	45	48	35	34	36	31	33	34	38	39	41	..	36.5
Louisville	Maximum	62	61	54	66	63	70	69	60	63	48	48	32	33	39	39	32	40	53	64	66	65	54	41	51	40	42	45	55	53	48	..	51.9
	Minimum	54	40	37	40	42	45	49	53	46	40	31	23	22	21	30	26	26	33	42	47	54	38	37	38	34	38	35	37	41	35	..	37.8
Do (Cherokee Park)	Maximum	62	61	53	65	62	68	68	66	63	61	47	43	31	39	39	36	39	52	63	66	65	65	41	51	49	46	44	54	53	53	..	53.5
	Minimum	50	41	37	35	34	36	44	53	56	37	32	22	16	16	30	28	25	29	34	44	52	39	36	37	33	36	33	35	39	42	..	36.0
St John	Maximum	65	63	57	67	65	74	72	55	62	55	52	32	34	37	38	34	43	54	64	68	67	53	41	45	52	54	47	54	52	49	..	53.5
	Minimum	40	38	29	29	31	41	41	54	54	38	30	23	15	11	31	28	25	27	31	38	50	36	35	36	30	23	34	37	41	41	..	33.9
Scott	Maximum	64	58	55	65	64	68	59	52	60	58	49	40	38	41	37	32	34	45	62	65	64	61	39	47	45	40	40	51	56	53	..	51.4
	Minimum	47	38	38	35	34	35	48	50	51	35	30	21	12	17	32	29	27	25	41	44	50	39	36	39	36	36	34	35	38	46	.	35.9
Shelbyville	Maximum	67	61	58	70	66	76	70	65	63	56	50	44	38	42	38	34	40	53	66	68	65	62	39	42	53	40	39	48	52	50	..	53.8
	Minimum	44	38	33	29	29	35	41	50	51	30	26	19	11	12	27	24	22	21	30	46	43	34	31	30	27	32	30	34	32	39	..	31.7
Taylorsville	Maximum	68	62	54	65	61	67	70	66	64	60	48	44	32	40	38	36	39	51	63	66	68	64	41	52	48	41	46	54	53	51	..	53.7
	Minimum	45	41	33	27	27	29	37	52	55	37	26	23	11	12	31	27	25	22	25	30	38	38	35	33	26	35	34	38	32	41	..	32.2
Williamstown	Maximum	65	62	51	63	61	68	61	59	61	59	48	41	36	41	40	34	35	47	61	64	64	63	45	47	44	39	41	53	54	55	..	52.1
	Minimum	49	38	36	34	35	37	47	49	50	34	29	21	14	18	28	28	24	21	36	41	47	38	33	35	30	32	32	34	35	43	..	34.3
Eastern Division.																																	
Ages	Maximum	67	65	58	66	63	59	63	67	63	59	50	48	32	41	..	42	..	40	43	44	58	58	42	49	45	49	43	53	56	52	..	[b]52.5
	Minimum	44	54	33	33	33	29	35	52	48	47	45	28	19	18	..	29	..	13	23	27	29	41	35	38	33	36	35	41	40	43	..	[b]35.0
Ashland	Maximum	71	66	52	64	66	69	79	62	64	63	55	49	37	42	42	39	35	43	57	64	69	67	44	50	48	45	44	53	57	54	..	55.0
	Minimum	49	51	35	32	38	42	49	53	53	39	39	29	15	16	33	31	28	17	21	33	37	44	37	38	37	32	33	42	31	41	.	35.8
Beattyville	Maximum	70	67	63	71	72	78	78	67	62	60	57	46	43	47	40	37	41	52	60	70	73	64	42	55	47	47	46	61	61	53	..	57.7
	Minimum	45	49	34	30	31	29	36	52	52	41	34	28	12	12	32	30	27	31	20	25	28	41	36	39	27	35	31	33	33	39	..	33.1
Berea	Maximum	70	62	57	58	67	77	74	76	62	62	52	39	37	48	44	34	41	52	63	67	69	60	51	53	49	47	43	57	62	53	..	56.2
	Minimum	32	40	32	35	33	32	46	53	55	48	29	25	11	12	32	27	22	32	35	43	49	37	35	35	33	33	35	34	35	43	..	34.8
Farmers	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Maysville	Maximum	68	63	51	61	61	65	64	61	63	60	48	41	35	42	40	36	37	44	54	64	64	62	41	48	47	41	46	52	57	50	..	52.2
	Minimum	46	43	36	31	34	35	44	53	52	39	32	27	18	16	34	29	27	20	30	37	41	48	36	39	37	31	33	39	35	44	..	35.5
Middlesboro	Maximum	70	63	60	64	70	73	70	70	65	57	50	47	40	42	40	36	37	45	55	60	63	62	45	50	50	50	46	53	57	50	..	54.7
	Minimum	43	45	30	32	30	28	32	47	48	48	47	29	17	16	32	30	26	17	21	24	26	43	36	36	27	33	34	40	35	42	..	33.0
Mount Sterling	Maximum	71	65	53	62	63	71	72	62	66	57	50	42	32	45	40	34	36	45	58	64	68	57	40	52	45	41	44	52	57	61	..	53.5
	Minimum	46	43	36	33	30	35	42	52	53	39	31	24	13	13	32	27	17	13	32	38	42	38	34	36	29	32	32	36	34	40	..	33 4
Richmond	Maximum	72	66	56	64	67	73	74	65	61	61	53	42	38	47	40	34	36	50	64	67	70	63	52	49	47	44	44	54	61	56	..	55.7
	Minimum	50	56	36	38	41	37	48	52	55	42	34	34	16	16	33	32	23	24	34	42	46	39	35	35	33	34	40	34	39	44	..	37.4
Williamsburg	Maximum	73	63	60	66	69	76	75	73	71	64	52	47	38	42	41	38	41	51	60	67	67	56	42	56	48	55	45	52	57	53	..	56.6
	Minimum	49	40	32	32	31	31	38	51	56	44	40	28	15	17	32	29	26	15	26	30	33	41	86	37	29	35	38	42	35	40	..	34.3

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

a, b, c, etc. indicate respectively 1, 2, 3, etc., days missing from record.

Total Precipitation, Inches, November, 1920.



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CLIMATOLOGICAL DATA

KENTUCKY SECTION

DECEMBER, 1920.

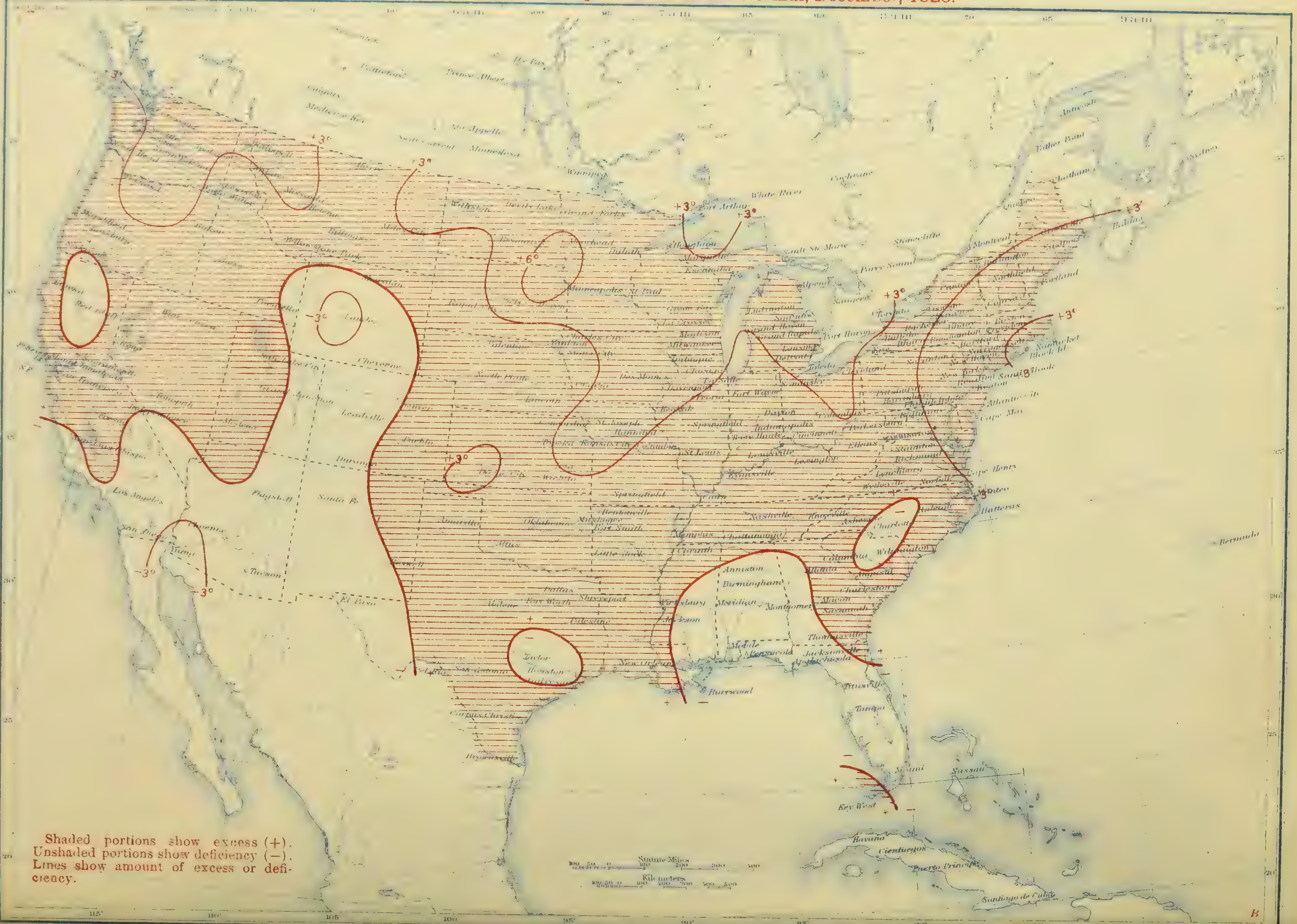
BY

JAMES L. KENDALL

METEOROLOGIST

LOUISVILLE, KY.
WEATHER BUREAU OFFICE
JANUARY 31, 1920.

Departure of the Mean Temperature from the Normal, December, 1920.



Shaded portions show excess (+). Unshaded portions show deficiency (−). Lines show amount of excess or deficiency.

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

Vol. XXV. Louisville, Ky., December, 1920. No. 12

GENERAL SUMMARY.

Temperature generally above normal, with frequent showers, characterized the weather during the first half of the month. Winter grains made some growth during this period; while pastures, especially rye sown for pasture, furnished good grazing. The abundant atmospheric moisture was favorable for stripping tobacco, which progressed rapidly. Although fields were muddy much of the time, outdoor work was facilitated by the mild temperature, and corn gathering proceeded without delay. The last half of the month was generally cold, with a week of comparatively severe temperatures from the 23d to 29th. Grains and grasses apparently suffered no injury of consequence from the hard freezes during this period, due to the relative dryness of the soil, and were in good condition at the close of the month. This cold weather was timely and beneficial for the farmers in affording an opportunity to pack their meat, for which purpose weather conditions had not been favorable until this period. A noticeable tendency of shrubs and fruit trees to bud prematurely was checked. Although precipitation for the State as a whole averaged considerably below normal, monthly amounts in the extreme western counties were generally above normal, overcoming in a large measure the effects of the previous deficiency in that district. In the northern and central counties precipitation was considerably below normal, this district coinciding largely with the area of light rainfall in November preceding. Moisture in this section was sufficient for winter grains, but some localities reported a shortage of stock water. Snow in moderate amounts occurred in the northern counties on the 26th, but it melted quickly and gave little protection to grain. Because of the light precipitation of the past three months, highways remained in better condition than usual.

TEMPERATURE.

The average temperature for the State, 40 stations reporting, was 38.6°, which is 1.5° above normal. In the periods 1st-6th and 11-14th maximum temperatures ranged between 50° and 60,° while minimum temperatures during the first two weeks were above freezing on most days. In the periods, 18-20th and 24-29th, minimum temperatures ranged between 10° and 25°; and on the 28th, the coldest day in most of the State, minima from 4° to 10° were registered in the western and central counties. The extremes at the various stations were 68° at Hopkinsville on the 13th and 4° at Shelbyville on the 28th.

PRECIPITATION.

The average precipitation for the State, based on the reports of 57 stations, was 2.89 inches, which is 1.05 inches less than normal. Periods with precipitation generally over the State were: 4-5th; 7-10th; 13-14th; 21st-23d, and 26-27th. The snow of the 26-27th ranged from two to six inches in the northern half of the State, but there was no snow of consequence in the southern counties. In the extreme western and southeastern counties precipitation ranged between 4.00 and 7.00 inches. In a large area bordering these sections and including the southern belt of counties amounts ranged between 3.00 and 4.00 inches. In the north-central district, including most of the blue grass region, monthly totals were generally between 1.00 and 2.50 inches. Amounts at the various stations ranged between 1.16 inches at Shelbyville and 7.02 inches at Lone Oak, near Paducah. Thunderstorms were reported from several stations on the 1st, 3d and 4th.

MISCELLANEOUS

Rivers.—Fluctuations in stage in the Ohio during the month were slight and unimportant. Good conditions for navigation prevailed, but the dams were necessary at times to maintain these stages. Tributary streams in Kentucky were unusually low for the time of year.

PRESSURE AND WIND.

Stations	Atmospheric Pressure (In inches reduced to sea level)					Wind				
	Average.	Highest.	Date.	Lowest	Date.	Total movement	Av. hourly velocity.	Max. Velocity.* Miles per hour	Max. Velocity.* Direction	Max. Velocity.* Date.
Cairo .... Ill.	30.03	30.45	24	29.31	13	8138	10.9	42	w.	13
Cincinnati .... Ohio	30.03	30.47	25	29.29	13	8157	11.0	45	sw.	14
Evansville....... Ind.	30.04	30.43	25	29.30	13	10615	14.3	54	w.	14
Lexington .... Ky.	30.06	30.46	25	29.38	13	12942	17.4	51	sw.	14
Louisville .... Ky.	30.05	30.48	25	29.34	13	11223	15.1	57	sw.	14

*For any five minute period.

HUMIDITY AND SUNSHINE.

Stations.	Rel. Humidity.			Sunshine.				
	7 a. m.	Noon.	7 p. m.	Total hours of Sunshine.	No. of hours possible	Percentage of possible.	Number of days with 80 per cent or more	Number of days with 20 per cent or less
Cairo .... Ill.	82	68	66	161.5	299.1	54	13	10
Cincinnati .... Ohio.	81	67	81	105.8	293.4	36	4	14
Evansville........ Ind.	78	66	72	133.3	296.3	45	10	11
Lexington .... Ky.	82	74	......	74.6	296.3	25	6	21
Louisville .... Ky.	78	69	69	102.5	296.3	35	5	15

COMPARATIVE DATA FOR DECEMBER.

Year	Temperature.				Precipitation.		
	Monthly average.	Departure from 30 year normal	Highest.	Lowest.	Monthly average.	Departure from 30 year normal	No. of days with .01 or more rain
1889	50.2	+13.1	76	13	1.57	−2.37	
1890	37.8	+0.7	70	12	3.51	−0.43	..
1891	42.4	+5.3	70	15	4.10	+0.16	..
1892	34.6	−2.5	74	−3	4.22	+0.28	..
1893	39.0	+1.9	78	10	2.69	−1.25	
1894	38.7	+1.6	76	−11	4.31	+0.37	10
1895	38.8	+1.7	77	6	4.43	+0.49	9
1896	39.6	+2.5	73	7	1.82	−2.12	4
1897	38.0	+0.9	72	3	3.75	−0.19	10
1898	34.1	−3.0	70	−12	2.74	−1.20	8
1899	34.8	−2.3	70	−15	4.26	+0.32	10
1900	38.6	+1.5	70	12	2.59	−1.35	8
1901	32.3	−4.8	72	−22	4.90	+0.96	10
1902	36.7	−0.4	72	−3	7.36	+3.42	12
1903	30.7	−6.4	58	0	2.88	−1.06	7
1904	36.4	−0.7	72	−2	4.30	+0.36	11
1905	37.3	+0.2	66	11	4.38	+0.44	8
1906	39.0	+1.9	76	−9	5.64	+1.70	15
1907	38.5	+1.4	70	8	3.20	−0.74	11
1908	39.8	+2.7	74	7	2.42	−1.52	9
1909	29.9	−7.2	79	11	3.46	−0.48	9
1910	33.1	−4.0	66	3	3.37	−0.57	8
1911	41.6	+4.5	74	11	6.25	+2.31	12
1912	37.2	+0.1	73	5	3.98	+0.04	9
1913	39.5	+2.4	70	11	2.73	−1.21	7
1914	32.8	−4.3	70	−16	5.22	+1.28	14
1915	37.0	−0.1	74	9	7.56	+3.62	12
1916	35.5	−1.6	74	−14	4.23	+0.29	8
1917	26.5	−10.6	72	−21	2.01	−1.93	8
1918	44.8	+7.7	75	14	4.44	+0.50	12
1919	34.6	−2.5	68	3	4.93	+0.99	[illegible]
1920	38.6	+1.5	68	4	2.89	−1.05	9

Climatological Data for December, 1920.

Stations	Counties	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	With precip. 0.01 in. or more.	Clear.	Pt. cloudy.	Cloudy.		
Western Division.																				
Beaver Dam	Ohio	441	17	40.2	+ 4.6	63	12	13	25	32	2.57	−1.38	0.85	2.0	9	16	9	6	sw.	Miss Addie B. Taylor.
Blandville	Ballard	445	38	40.2	+ 3.4	63	12	9	28	27	5.54	+1.61	2.13	0.2	9	12	5	14	sw.	E. W. Horr.
Calhoun	McLean	437	16	38.8	+ 1.4	60	12†	8	28	30	3.17	−1.00	1.10	3.0	7	8	10	13	sw.	W. A. Taylor.
Earlington	Hopkins	420	29	39.4	+ 1.3	62	12	6	28	30	3.28	−0.53	0.76	3.0	11	13	2	16	s.	Brick Southworth.
Greenville	Muhlenburg	519	3	^{a}39.3	...	65^a	13	6^a	29	32^a	3.52	...	1.10	...	10	13^a	6^a	11^a	n.	C. R. Lovell.
Henderson	Henderson	327	12	...	...	...	...	...	...		5.10	+1.09	1.35	2.0	12	...	...	...	...	W. W. Shelby.
Hopkinsville	Christian	524	23	40.2	+ 2.4	68	13	7	28	33	3.68	−1.05	1.26	0	10	7	3	21	w.	W. E. Graves.
Marion	Crittenden	571	21	39.4	+ 1.9	63	12	8	28	25	4.69	+0.47	1.61	T.	7	12	5	14	s.	B. C. Paris.
Mayfield	Graves	364	10	40.0	+ 1.5	60	13†	12	28	27	4.27	−0.09	1.00	1.1	10	17	3	11	sw.	N. E. Douthit.
Owensboro	Daviess	479	23	39.2	+ 2.6	67	13	9	28	28	2.35	−1.51	0.62	2.0	9	9	5	17	nw.	Henry S. Berry.
Paducah (Lone Oak)	McCracken	516	3	38.6	...	62	13	12	26	20	7.02	...	2.00	0	11	12	0	19	s.	E. Futrell, Jr.
Paducah	McCracken	341	31	...	...	...	...	...	...	...	5.74	+1.98	1.90	0	9	...	...	...	...	Frank L. Brown.
Princeton	Caldwell	529	10	40.5	+ 2.8	62	2†	7	28	35	3.98	−0.46	1.65	1.5	11	12	5	14	s.	Dr. W. L. Cash.
Russellville	Logan	590	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Wm. A. Shelton.
Central Division.																				
Alpha	Clinton	811	25	...	...	63^b	14†	...	...	...	2.91	−1.83	0.64	...	6	8^b	5^b	16^b	sw.	Frank Hicks.
Anchorage	Jefferson	700	19	36.0	+ 2.4	59	13	6	28	30	1.52	−2.46	0.49	3.0	6	11	6	14	sw.	C. E. Barret.
Bardstown	Nelson	637	23	38.4	+ 2.7	59	11†	7	28	27	1.44	−2.92	0.72	4.0	7	12	0	19	w.	Chas. M. Talbott.
Bowling Green	Warren	500	29	40.0	+ 2.4	63	13	12	28	33	4.30	−0.02	0.95	T.	7	13	11	7	w.	Mrs. Lillie G. Causey.
Brownsville	Edmonson	410	2	...	...	...	...	...	...	...	3.26	...	1.10	...	12	...	...	...	...	James H. Young.
Burnside	Pulaski	773	27	...	...	...	...	...	...	...	3.68	−0.61	1.03	...	9	...	...	...	...	F. E. Bradshaw.
Camp Knox	Hardin	736	0	37.6	...	59	12	7	28	25	2.44	...	1.10	4.0	8	6	4	21	w.	Signal Corps, U. S. A.
Carrollton (Lock No. 1)	Carroll	492	21	...	...	...	...	...	...	...	1.44	−1.56	0.43	...	11	...	...	...	...	Charlie Oliver.
Cloverport	Breckenridge	375	6	...	...	...	...	...	...	...	3.05	...	1.06	5.0	9	...	...	...	...	W. A. Cockerill.
Eubank	Pulaski	1177	25	37.9	+ 2.2	59	13†	10	25	30	2.52	−0.90	0.82	2.0	7	9	2	20	sw.	Mrs. Katie Payne.
Frankfort	Franklin	560	27	38.6	+ 1.3	60	13†	10	28	25	1.25	−2.34	0.30	2.0	10	8	3	20	s.	Mrs. Amelia Wood
Franklin	Simpson	691	24	42.0	+ 2.0	63	14†	12	28	28	3.30	−0.98	0.85	...	12	15	1	15	n.	B. V. Hunt.
Greensburg	Green	581	27	38.6	+ 2.6	61	13	10	25	37	3.30	−0.86	1.00	T.	11	6	4	21	se.	Mrs. Bettie K. H. Alcorn.
High Bridge	Jessamine	762	17	...	...	...	...	...	...	...	2.07	−2.33	0.65	3.0	10	...	...	...	...	Miss Lulu Wood.
Irvington	Breckenridge	646	22	38.8	+ 2.8	60	12	8	28	23	2.23	−1.67	0.90	4.0	8	9	3	19	sw.	W. J. Piggott.
Junction City	Boyle	985	26	39.2	+ 3.9	67	13	8	25	35	3.64	−0.59	0.85	5.2	10	9	7	15	sw.	Prof. E. L. Grubbs.
Leitchfield	Grayson	635	24	38.5	+ 2.7	60	12†	8	28	27	2.23	−2.39	0.68	2.5	6	10	6	15	w.	John E. Stone.
Lexington	Fayette	989	32	36.2	− 0.2	58	13	9	28	22	1.40	−1.92	0.57	2.5	11	6	3	22	sw.	U. S. Weather Bureau.
LOUISVILLE	Jefferson	525	47	38.1	0.0	59	12	8	28	24	2.09	−1.64	0.72	3.0	8	7	6	18	w.	U. S. Weather Bureau.
Do. (Cherokee Park)	Do.	534	10	38.0	+ 3.1	58	12†	8	28	25	2.11	−2.06	0.52	2.5	11	8	7	16	s.	Wm. I. Hunt.
St. John	Hardin	777	23	37.6	+ 3.0	59	12	10	25	30	2.26	−2.16	0.77	6.0	7	12	8	11	...	Sisters of Loretto.
Scott ¶	Kenton	900	22	36.4	+ 3.2	57	3†	5	28	22	1.44	−1.77	0.43	2.3	9	3	11	17	sw.	E. B. Wilson.
Shelbyville	Shelby	825	31	35.3	+ 0.3	60	13	4	28	30	1.16	−2.73	0.49	4,5	7	9	5	17	w.	F. A. Miller.
Taylorsville	Spencer	489	17	37.3	+ 2.2	60	13	8	28	27	1.84	−2.58	0.61	2.5	10	7	3	21	sw.	E. D. Bourne.
Williamstown	Grant	943	17	36.2	+ 3.3	59	13	6	28	28	1.46	−2.14	0.39	1.3	11	10	6	15	nw.	Mrs. E. S. Humlong.
Woodbury	Butler	533	2	...	...	...	...	...	...	...	3.05	...	0.70	1.0	10	...	...	...	...	J. C. Stinson.
Eastern Division.																				
Ages	Harlan	1256	0	39.1	...	59	14	18	29	25	4.61	...	1.53	1.0	11	8	2	21	...	S. A. Driver.
Ashland	Boyd	534	13	39.4	...	64	14	17	25	29	1.83	...	0.55	T.	7	3	7	21	w.	Forester Farley.
Beattyville	Lee	650	16	39.2	+ 4.1	61	2†	10	29	40	2.25	−2.42	0.52	1.0	12	2	8	21	ne.	Mrs. Sabina E. Hall.
Berea	Madison	1070	18	39.4	+ 2.7	59	13†	10	25	29	2.77	−1.82	0.60	3.0	7	10	8	13	sw.	Prof. Chas. D. Lewis.
Cynthiana	Harrison	684	2	...	...	...	...	...	...	...	2.15	...	0.75	1.0	7	...	...	...	...	P. H. Kehoe.
Falmouth	Pendleton	600	31	...	...	...	...	...	...	...	1.85	−1.50	0.72	2.0	8	11	8	12	sw.	J. V. Oldham.
Farmers	Rowan	668	12	36.8	+ 1.7	61	6	10	25	37	2.08	−1.67	0.52	2.3	5	2	11	18	ne.	Miss Avis Norman.
Jackson	Breathitt	776	8	...	...	...	...	...	...	...	3.55	−0.05	1.00	2.0	7	...	...	...	...	Nick Kelly.
London	Laurel	1190	5	...	...	...	...	...	...	...	2.62	...	0.60	T.	13	...	...	...	...	C. R. Lee.
Louisa	Lawrence	584	16	...	...	...	...	...	...	...	2.43	−0.73	0.70	...	10	...	...	...	...	T. D. Snyder.
Maysville	Mason	524	22	38.0	+ 4.2	62	13	11	28	23	1.89	−1.87	0.55	6.0	7	10	1	20	w.	Harry M. Robinson.
Middlesboro	Bell	1128	21	40.0	+ 2.1	63	22	15	29	34	5.15	+1.00	1.75	...	10	16	5	10	...	B. H. Perkins.
Mount Sterling	Montgomery	930	30	37.0	+ 2.1	59	4	10	25	26	2.27	−1.97	0.59	3.0	9	8	3	20	nw.	W. R. McKee.
Oliver	Greenup	540	0	...	...	...	...	...	...	...	1.77	...	0.53	T.	10	...	...	...	...	W. C. Hash.
Pikeville	Pike	634	14	...	...	...	...	...	...	...	3.32	−0.55	0.64	...	9	...	...	...	...	I. M. Williams.
Richmond	Madison	926	25	39.4	+ 2.3	58	4†	13	25	26	2.30	−1.65	0.50	1.0	10	6	4	21	...	J. W. Crooke.
Vanceburg	Lewis	525	3	...	...	...	...	...	...	...	1.74	...	0.54	3.5	7	...	...	...	...	Samuel Johnson.
Williamsburg	Whitley	939	22	41.2	+ 2.9	61	11	17	29	33	3.73	+0.04	0.93	T.	11	11	6	14	w.	D. B. Bradley.
State averages and extremes		...		38.6	...	68	13	4	28	40	2.89	...	2.13	2.0	9	9	6	16	sw.	

All temperature data are taken from self-registering thermometers.

The departures from normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, ª, ᵇ, ᶜ, appearing in the table indicate number of days missing; for example, b represents two days, etc.

† Also on other dates. †† Received too late to be included in means and summaries. T Precipitation is less than 0.01 inch rain or melted snow.

¶ Post office address, Covington, Ky.

Daily Precipitation for December, 1920.

Stations		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	[illegible]
Western Division																																	
Beaver Dam	G.	.05			.60	.03			.05	.04				.35	.80								.30				.85						[illegible]
Blandville	M.	.04			.49			.51		.05				.54								2.13	.47				1.27					.01	5.54
Calhoun	G.	.11			.65	T			T	T	T		T	.59	.02	T						.23	.41	T			1.10					T	3.17
Earlington	G.	.05			.48	.07			.26		.02			.03	.63								.32	.06			.60	[illegible]					[illegible]
Greenville	G.				.88			.30	.20	.01				.50	.10							.01	.32				1.10	[illegible]					[illegible]
Henderson‖	O.	.25			.60	.10				.10				.17	.65							.50	1.35	.05			.20	1.05				[illegible]	5.10
Hopkinsville	C.	.07			.74			.31	.43	.04	.01		T	.44	T.							.02	.36				1.26	T					3.68
Marion	O.	.28			.75			.28						.77								.78	.83				1.00					T	4.69
Mayfield	M.				.20	.30		.50		.05		.01		.30								.90	1.00				1.00					.01	[illegible]
Owensboro	O.	.18				.05				T	.02			.15	.40	T.						.28	.62	T.			.40	.25				T	2.35
Paducah (Lone Oak)	O.	.12			1.00			.46	.24	.02		.02	.01	.75								1.00	2.00				1.40		T			T	7.02
Paducah‖	O.	.20			.74				.56					T	.20							.40	1.90	.44			.82	.48					5.74
Princeton	G.	.04			.68			.16	.10	.02	.01		T	.73								.12	.44	T			1.65	T				.03	3.98
Russellville‖	G.																																
Central Division.																																	
Alpha	C.				.40				.60	T				.60									.64	T			.20	.47					2.91
Anchorage	O.	.07			.29					.03				.45	T	T				T.		.19				.49							1.52
Bardstown	S.	.15			.16						.06			.20	.03								.12				.72						1.41
Bowling Green	G.				.20	.58			.72						.75												.95	.80				.30	4.30
Brownsville‖	G.	.03			.02	.66			.20		.03		.03	.02	.80								.32	.04			.01	1.10					3.26
Burnside	C.	.37				.26			.48		.05		.04		1.03								.47	.32				.66				T.	3.68
Camp Knox¶	O.	.18			.34	.04				T	T.			.44	.30								T.	.04			.86	.24					2.44
Carrollton (Lock No. 1)	O.	.30			.03	.02					.02			.01	.43						.02		.20	.06			.25	.10					1.44
Cloverport	O.	.01			.39	.17					.16				.39								1.06	.05	T		.52	.30					3.05
Eubank	C.					.18			.13		.06				.82								.58				.56	.25					2.52
Frankfort	K.	.30			.02	.06					.01	.01			.30		T.		T.		T.		.07	.02	T.		.20	.26					1.25
Franklin	G.	.03			.40			.40	.34		.04			.54	.17								.26				.85	.08			.09	.10	3.30
Greensburg	G.	.01			.12	.37			.16	T.	.05		.01	.17	.49								.42				1.00	.20					3.30
High Bridge	K.	.33	.09						.01	.06	.01				.35								.19	.05			.30	.65					2.07
Irvington	O.	.22			.37					.03	.05			.46		T.						.05	.15	T			.90	T					2.23
Junction City	K.	.30			.05				.85		T.		.05		.67							.01	.65				.80	.16	.10				3.64
Leitchfield	G.	.03			.61					.20				.68										.30			.41					T.	2.23
Lexington ***	K.	.04			.08				T.	.02	.05		T.	.47		.01		T.		.01			.11		T.		.57	.03	T			.01	1.40
LOUISVILLE***	O.	.03			.25					.03	T.		.04	.65		T.		T.		T.		.24	.13	T.			.72						2.09
Do. (Cherokee Park)	O.	.05			.19	.07					.04			.33	.25		T.	T.		T.		.25	.13	.04			.24	.52					2.11
St. John	S.	.09			.42	.01				.05			T	.65		T.							.27				.77				T	T	2.26
Scott	L.				.06					T.	.11			.15	.43	T.	.03	T.		T.		.17	.01	.05			.43						1.44
Shelbyville	S.	.11			.22					.02	.02			.01					T.				.29				.49						1.16
Taylorsville	S.	.19			.20	.09				T.	.03		T.	.22	.17	T.	T	T.		T.		T	.19	.02	T.		.61	.12	T				1.84
Williamstown	L.	.05			.02	.08					.10			.16	.35			T		.02		.06	.12	T.			.39	.11					1.46
Woodbury‖	G.	.07			.24	.36			.12		.05				.70								.26	.06			.58	.61					3.05
Eastern Division.																																	
Ages	K.	.18			.12	.41		T.	1.04		.06		.05	.15	1.53		.02						.89	T.	T.		T.	.16					4.61
Ashland	O.	.26	T.			.24					.03	.01			.55		T	T.			T.			.40			T.	.34					1.83
Beattyville‖	K.	.30	.04			.18			.52	.08	.04	T.		.08	.21								.34	.08		T.	.10	.28	T.				2.25
Berea	K.	.20							.60	.52	.14				.28								.46				.57						2.77
Cynthiana‖	L.	.45				.30				T.	.05	T.			.75			T.	T.	T.	T.		.10	T		T.	.10	.40					2.15
Falmouth‖	L.	.31			.01	.05					.06	T.			.72	T.	T			T.	T.		.20				.20	.30					1.85
Farmers	L.	.41	T.												.32	.42		T.						.41	T.		.23	.29					2.08
Jackson‖	K.	.45	T.			.40			.40	T.	.10	T.		.20	1.00								T.	.50		T	.50	T.				T	3.55
London‖	C.	.18			.02	.30			.40	.10		.12	.05	.15	.60								.25	.10				.30	.05				2.62
Louisa	B.	.30	.09			.26				.03	.02				.70	.07	.01							.35				.60					2.43
Maysville‖	O.	.20	T.		T.	.34					.08	T.			.55	T.				T.	T.		.13	T.			.15	.44					1.89
Middlesboro	C.	.10			.35	.44		.11	.77				.05	.16	1.75								1.25					.17					5.15
Mount Sterling	L.	.13			.09	T				T.	.22		.02	.11	.51	T.	T.			T.			.31	T.	T		.59	T.	T.		T.	.29	2.27
Oliver	O.	.09			T.	.15					.12	.06		.02	.53		T.	.02			T.		.14	.27			T	.37					1.77
Pikeville‖	B.	.12				.42			.52	.64	.18			.12	.72		T.							.52				.08					3.32
Richmond	K.	.28			.02	.05			.50	T.	.04		T.	T.	.50								.31	T.	T.		.40	.17				.03	2.30
Vanceburg‖	O.	.11									.20	.05			.54						T.			.27			.20	.37					1.74
Williamsburg‖	C.	.31	T.			.30			.64	.09	T.	.02	T.	.02	.93		T.						.28	.68				.38	.08			T.	3.73

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation.

(Reference mark ***) Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement.

‡ Separate dates of falls not recorded. T. Trace, or less than 0.01 inch.

River drainage area in which station is located is indicated as follows: (B) Big Sandy; (L) Licking; (K) Kentucky; (S) Salt; (G) Green; (C) Cumberland; (T) Tennessee; (O) Ohio; (M) Mississippi.

¶ Precipitation for 24 hours ending at 3 p. m.

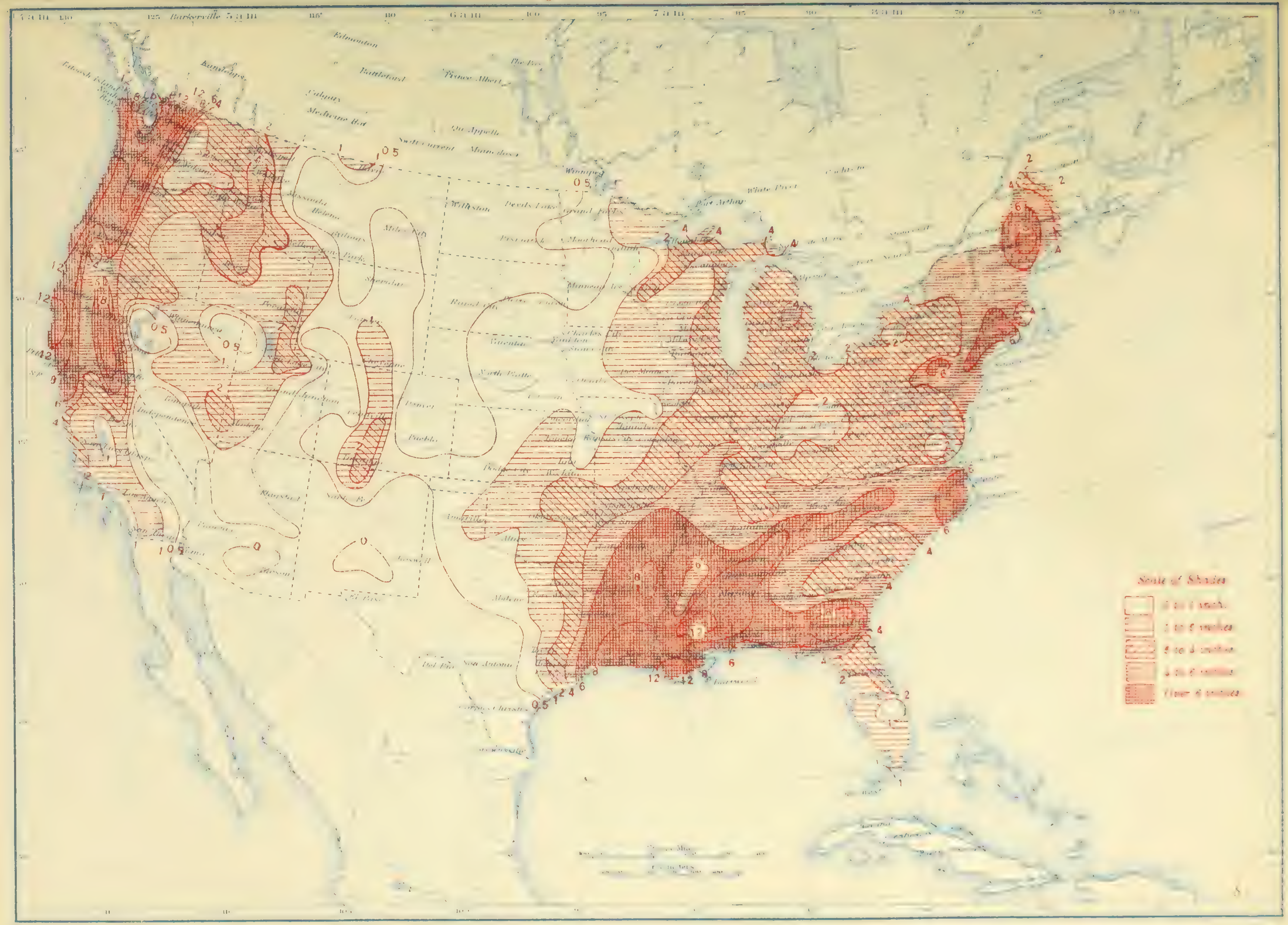
Daily Temperatures for December, 1920.

Stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean
Western Division.																																	
Beaver Dam	Maximum	51	62	55	57	58	51	45	46	56	45	57	63	62	58	50	50	48	43	41	45	45	52	53	35	32	36	36	26	47	58	59	49.1
	Minimum	35	30	43	48	34	30	25	34	29	38	25	49	54	38	35	31	30	25	27	21	32	43	27	23	13	27	20	15	15	34	37	31.2
Blandville	Maximum	51	59	55	57	54	47	42	39	40	50	59	63	61	55	48	52	48	42	42	47	51	53	36	29	36	42	36	28	47	55	55	47.7
	Minimum	37	32	46	45	31	39	32	30	32	38	33	51	54	38	35	33	31	23	27	24	37	36	26	20	17	32	19	9	24	35	44	32.6
Calhoun	Maximum	51	59	56	56	53	51	43	46	43	47	54	60	60	57	49	49	48	39	38	42	45	52	41	28	30	36	36	35	43	50	54	46.8
	Minimum	36	29	42	48	32	31	36	30	39	38	25	46	55	38	34	31	29	20	28	21	31	41	26	21	13	28	19	8	18	34	30	30.9
Earlington	Maximum	45	58	55	57	52	44	41	44	42	45	56	62	60	58	49	50	47	41	41	44	48	54	38	30	32	39	39	24	45	55	56	46.8
	Minimum	35	33	47	46	32	32	36	33	38	33	26	51	55	38	35	33	30	19	28	22	34	37	27	20	14	30	16	6	21	38	44	31.9
Greenville	Maximum	51	59	56	59	54	46	41	45	42	45	56	63	65	61	50	51	48	42	43	45	49	54	43	32	34	39	41	27	46	55	..	^{a}48.1
	Minimum	34	29	44	47	31	31	36	34	37	37	24	49	54	38	34	31	28	12	26	21	31	41	27	21	12	28	18	6	18	35	..	^{a}30.5
Hopkinsville	Maximum	51	61	57	59	57	49	44	43	47	49	59	63	68	61	64	54	48	44	47	50	51	54	44	35	36	39	39	29	48	56	58	50.5
	Minimum	37	28	41	48	32	32	37	34	32	38	26	30	35	37	32	35	31	18	24	24	36	42	28	22	9	29	21	7	21	23	42	30.0
Marion	Maximum	52	60	54	55	55	50	42	44	40	48	56	63	61	59	48	50	47	42	44	48	50	53	39	30	31	37	38	25	44	53	53	47.5
	Minimum	36	35	48	40	32	36	35	31	34	38	35	52	45	36	34	30	30	22	28	23	32	38	26	18	14	25	17	8	21	31	41	31.3
Mayfield	Maximum	50	49	48	51	47	51	52	53	50	55	53	56	60	60	49	39	45	44	51	50	52	53	44	45	41	42	43	30	45	55	56	49.0
	Minimum	35	34	32	36	33	37	40	39	38	40	37	35	32	35	30	30	26	27	24	25	38	39	24	21	18	20	23	12	23	35	46	31.1
Owensboro	Maximum	50	59	55	55	51	43	44	52	42	46	55	64	67	56	53	47	47	39	39	43	47	52	47	27	34	36	38	37	40	47	56	47.4
	Minimum	38	32	42	38	33	34	36	32	40	32	30	45	48	36	38	32	28	22	28	23	32	40	26	20	14	30	20	9	20	30	36	31.1
Paducah (Lone Oak)	Maximum	48	51	54	55	47	48	36	36	39	40	56	61	62	60	50	49	50	46	37	44	50	50	46	31	33	24	26	26	39	45	52	44.9
	Minimum	34	38	48	44	38	32	31	31	33	35	38	51	58	40	35	34	31	28	25	25	36	36	26	20	22	12	14	15	25	31	36	32.3
Princeton	Maximum	52	62	55	56	57	56	44	47	44	50	60	62	61	59	48	53	48	44	48	50	47	53	41	33	35	37	38	29	48	56	54	49.3
	Minimum	37	27	45	49	30	32	36	33	32	38	26	52	56	37	34	30	30	19	27	23	34	41	27	22	14	31	21	7	21	33	39	31.7
Russellville§§	Maximum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Central Division.																																	
Alpha	Maximum	..	..	59	59	57	56	57	59	53	50	56	58	60	63	60	60	59	50	47	49	50	63	55	48	42	51	40	36	46	54	56	^{b}53.6
	Minimum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	......
Anchorage	Maximum	48	58	56	54	49	44	49	46	41	41	53	58	59	58	46	44	45	37	31	37	42	52	44	27	37	39	37	24	41	44	51	44.9
	Minimum	29	29	37	44	28	26	32	29	33	30	23	39	52	38	31	30	25	20	18	15	26	36	25	8	21	15	17	6	16	30	40	27.0
Bardstown	Maximum	48	57	57	55	51	42	46	43	43	42	51	59	59	58	49	41	39	39	38	40	43	53	52	32	30	39	40	27	43	52	52	45.8
	Minimum	34	31	40	46	37	29	35	32	38	37	26	41	54	40	35	31	31	21	24	20	30	41	28	23	10	24	22	7	16	35	39	30.9
Bowling Green	Maximum	57	60	54	55	56	50	47	48	47	46	55	58	63	60	49	51	47	44	49	50	56	55	53	37	36	40	44	30	45	56	58	50.2
	Minimum	37	32	40	47	35	33	32	35	39	38	25	31	39	38	34	32	32	22	22	23	23	27	30	15	14	24	18	12	20	33	40	29.7
Camp Knox	Maximum	46	57	55	54	52	41	46	46	41	41	52	59	57	54	41	46	43	39	36	41	41	52	39	34	25	37	37	23	41	48	52	44.4
	Minimum	36	32	45	43	34	30	34	32	39	39	28	46	46	39	36	34	30	23	23	19	30	39	27	16	10	28	16	7	21	34	41	30.9
Eubank	Maximum	45	54	55	55	51	43	45	44	42	41	40	57	59	59	48	45	44	37	46	45	59	54	51	29	25	37	40	28	43	52	50	45.9
	Minimum	32	31	34	46	38	26	31	30	35	36	23	36	52	40	34	30	30	20	22	21	29	43	27	23	10	18	25	15	17	31	41	29.9
Frankfort	Maximum	49	54	57	57	55	44	48	47	46	44	51	57	60	60	51	43	45	36	36	38	42	53	53	31	30	38	38	27	40	49	51	46.1
	Minimum	36	35	38	38	37	31	35	32	34	40	31	40	54	41	36	33	32	24	23	19	28	40	28	23	12	25	26	10	19	31	32	31.1
Franklin	Maximum	48	62	55	57	55	45	44	42	44	45	58	62	62	63	60	52	48	43	51	52	57	61	57	35	38	38	44	32	46	60	63	50.9
	Minimum	36	34	41	47	38	33	36	34	38	39	30	48	55	38	34	32	31	21	26	24	32	48	30	22	15	26	23	12	19	32	50	33.0
Greensburg	Maximum	40	57	56	55	55	48	46	44	43	43	53	59	61	59	50	48	49	40	45	45	60	55	55	31	33	39	43	27	44	57	54	48.2
	Minimum	32	29	31	41	36	25	33	31	32	37	21	43	52	38	33	31	30	17	24	18	23	45	28	21	10	19	21	11	15	30	40	28.9
Irvington	Maximum	49	56	54	55	49	45	46	44	42	43	52	60	59	59	47	47	48	37	37	39	45	53	43	30	30	39	39	23	42	50	54	45.7
	Minimum	39	33	43	48	37	31	35	32	40	33	30	47	55	40	35	33	28	23	27	22	31	41	26	18	13	27	22	8	20	35	35	31.8
Junction City	Maximum	54	56	58	57	52	43	57	43	50	53	51	56	67	64	48	46	46	43	41	41	58	62	53	38	32	38	41	28	43	53	50	49.1
	Minimum	31	34	40	46	38	26	31	31	33	32	22	37	46	38	35	32	31	22	23	19	23	35	28	22	8	12	25	13	17	37	41	29.3
Leitchfield	Maximum	46	55	51	55	50	47	42	42	42	40	52	60	60	58	48	47	45	38	38	41	47	51	51	34	30	37	37	23	43	53	58	45.8
	Minimum	37	31	42	46	36	31	34	32	38	38	26	45	54	38	34	32	30	21	25	22	29	42	27	21	13	25	20	8	16	35	40	31.2
Lexington	Maximum	43	52	55	55	42	40	43	41	43	39	50	57	58	50	40	43	39	33	31	37	45	52	38	25	27	40	38	21	38	48	50	42.4
	Minimum	36	34	41	41	34	32	32	30	36	35	32	44	50	40	30	30	29	23	24	20	30	38	24	14	12	26	16	9	18	33	41	30.0
Louisville	Maximum	48	56	56	56	46	43	48	45	42	42	52	59	59	51	41	47	43	35	32	39	44	53	35	29	29	39	38	22	40	47	54	44.2
	Minimum	38	36	47	42	36	34	36	34	39	35	30	49	49	40	35	33	26	25	26	23	31	35	25	18	15	28	14	8	20	37	44	32.0
Do. (Cherokee Park)	Maximum	47	55	57	56	55	44	47	44	42	43	51	58	58	58	50	44	46	35	34	35	41	51	51	30	28	36	28	23	40	46	50	44.9
	Minimum	34	33	44	48	38	30	33	31	38	39	27	43	54	40	36	32	30	24	25	20	27	58	26	22	13	24	23	8	18	34	35	31.2
St John	Maximum	47	56	54	55	53	40	44	43	43	41	51	59	58	58	47	50	45	38	38	39	43	52	41	38	32	34	37	32	36	40	55	45.1
	Minimum	35	32	43	46	34	34	34	33	31	29	25	45	45	28	35	31	29	25	24	21	29	40	26	30	10	15	20	20	18	30	40	30.2
Scott	Maximum	47	55	57	54	54	41	44	41	41	40	57	56	60	57	46	41	37	35	29	38	39	50	51	30	25	35	35	24	38	47	49	43.5
	Minimum	28	37	43	47	38	31	33	28	26	36	29	37	52	39	32	29	29	25	21	13	24	37	25	20	13	22	22	5	17	31	35	29.2
Shelbyville	Maximum	48	57	55	53	47	43	47	47	41	41	52	56	60	58	42	45	42	39	33	31	44	51	51	33	27	37	37	26	42	47	50	44.6
	Minimum	29	27	37	40	33	26	31	27	29	34	21	39	50	35	31	27	12	18	18	15	24	44	23	11	11	21	12	4	13	31	31	26.0
Taylorsville	Maximum	47	54	57	55	54	44	47	45	43	42	50	57	60	59	49	45	46	37	35	39	42	53	53	30	28	37	38	24	41	49	50	45.5
	Minimum	31	31	34	46	37	27	34	31	38	38	23	37	54	39	35	32	30	20	19	16	27	38	27	21	10	23	23	8	15	29	29	29.1
Williamstown	Maximum	47	52	56	55	53	44	47	42	42	43	48	55	59	58	46	40	39	37	37	34	36	49	51	30	27	39	38	25	37	45	49	43.9
	Minimum	37	32	41	45	35	28	31	27	27	36	26	27	51	38	30	30	28	23	21	14	23	39	25	20	10	22	23	6	16	33	36	28.4
Eastern Division.																																	
Ages	Maximum	49	46	55	55	51	50	55	47	45	45	51	54	58	59	47	40	43	43	36	36	51	53	45	34	34	34	34	34	41	45	46	45.7
	Minimum	34	38	32	44	42	29	34	36	39	38	29	39	51	43	37	29	32	25	22	21	26	46	33	28	19	26	33	24	18	26	34	32.5
Ashland	Maximum	46	56	62	61	59	44	46	46	47	47	49	58	61	64	50	43	43	37	36	38	47	50	56	33	30	36	38	35	42	50	50	47.1
	Minimum	42	38	33	43	42	29	32	31	23	39	32	32	48	46	36	32	34	27	24	19	26	38	33	26	17	24	34	18	18	31	36	31.7
Beattyville	Maximum	47	61	61	60	60	52	51	45	42	42	58	58	58	61	54	47	45	42	45	45	59	52	54	54	33	35	37	32	50	58	52	50.0
	Minimum	35	29	29	37	37	29	29	32	30	39	27	27	47	44	37	32	33	20	21	17	21	34	26	26	12	16	31	19	10	25	34	28.5
Berea	Maximum	45	57	56	55	53	48	48	50	45	41	55	58	59	53	47	44	45	39	41	45	59	54	47	32	33	40	37	34	45	57	52	47.7
	Minimum	34	35	43	42	30	34	32	36	33	36	28	44	47	41	34	32	30	22	24	18	30	47	28	26	10	19	24	15	17	35	41	31.2
Farmers	Maximum	48	51	56	61	56	61	60	45	44	49	50	53	59	60	54	42	45	37	46	47	47	49	50	36	36	37	31	32	39	52	49	47.8
	Minimum	31	25	27	24	23	28	26	31	27	37	30	26	50	50	35	31	28	23	19	21	14	32	29	21	10	14	12	15	11	26	24	25.8
Maysville	Maximum	48	52	58	59	54	43	47	44	42	42	48	58	62	60	47	41	39	34	32	35	40	53	53	30	28	38	37	28	38	45	50	44.7
	Minimum	40	36	36	46	39	38	34	30	25	39	31	38	53	43	34	31	31	27	23	17	25	38	30	24	15	24	27	11	17	35	37	31.4
Middlesboro	Maximum	47	53	55	56	54	50	57	46	44	44	50	49	56	59	50	46	47	39	46	49	57	63	57	35	37	45	43	35	41	49	48	48.6
	Minimum	37	36	29	45	39	26	34	40	39	38	27	41	46	43	36	31	35	26	20	18	23	40	33	27	17	25	33	22	15	22	30	31.4
Mount Sterling	Maximum	48	52	56	59	53	42	46	40	44	43	49	57	58	58	47	41	45	36	35	38	47	52	53	31	28	37	38	25	40	50	50	45.1
	Minimum	33	32	35	45	30	28	31	30	26	36	26	35	51	40	33	30	27	22	22	19	25	37	27	22	10	20	23	13	15	32	39	28.8
Richmond	Maximum	47	55	55	58	54	51	46	42	45	44	54	57	58	51	49	44	44	38	36	43	53	53	50	39	30	38	41	31	42	52	50	46.8
	Minimum	35	34	41	49	39	32	33	32	34	37	30	50	49	41	34	30	31	23	25	21	27	41	29	23	13	23	28	14	18	35	40	32.0
Williamsburg	Maximum	48	59	58	57	55	44	52	43	45	44	53	54	57	61	49	48	48	41	50	52	57	53	55	34	39	40	45	32	45	58	54	49.4
	Minimum	33	31	33	42	41	38	34	36	38	39	28	43	51	43	35	32	32	23	24	29	24	42	32	27	26	26	32	21	17	28	40	32.9

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs

ᵃ ᵇ ᶜ etc. indicate respectively 1, 2, 3, etc., days missing from record

Total Precipitation, Inches, December, 1913.



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U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

KENTUCKY SECTION.

JAMES L. KENDALL, Meteorologist.

VOL. XXV. LOUISVILLE, KY., ANNUAL, 1920. No. 13

GENERAL SUMMARY.

The average temperature for the State for the year 1920 was below normal, most of the deficiency being due to the cool summer months. The mean temperature for every month, April to August, inclusive, was considerably below normal; a feature the more remarkable in that it was associated with the production of one of the finest crops of corn ever grown in the State. Precipitation averaged near normal, but was irregularly distributed throughout the year. Long dry periods alternated with extended wet spells, the change from one type of weather to the other usually occurring when a critical stage in farm work or crop development had been reached. Excessive rains in January, March, and April caused floods in the Ohio and tributary streams that overflowed lowlands and delayed the preparation and planting of much corn land, mainly in the western counties. Outstanding features of the year's weather were the cold wet spring, which delayed plowing and planting; the succession of hard freezes during the first half of April; the deficiency in rainfall in June and July; the wet August; the long period of warm, dry weather in September and October, and the late date of killing frost which permitted the delayed crops to mature. Frequent freezing and thawing in January, February and March caused further injury to wheat and grass. Heavy rains in January and March seriously hindered outdoor work; while the continuous rains and abnormally low temperature of April and the first half of May prevented most plowing and planting. Corn planting was delayed from two to three weeks, while preparation of soil was so retarded that much land could not be made ready in time for planting. Favorable weather set in about May 22d and, with the exception of a few rainy days near the first of June, continued until after harvest. Probably the largest part of the corn crop was planted during the last week in May and the first decade of June, from two to three weeks later than usual in this section. Weather conditions were excellent for harvesting and threshing wheat, but oats and early potatoes were injured by drought. During July precipitation was generally light and local which, following a dry June, resulted in drought over large districts. Some early corn began to "fire", but most of this crop was merely retarded in growth, escaping injury on account of late planting. Copious and timely rains early in August started the belated crops to growing rapidly. Showery weather continued until the middle of September, becoming somewhat too wet for best results. Heavy rains caused considerable damage by flooding of lowlands along the smaller streams. Dry weather set in about the middle of September, and continued until October 25th, with temperatures generally high and sunshine much above normal. The maturity of late corn, tobacco, and potatoes was hastened, and harvesting of the staple crops was completed in good time; but dry soil hindered plowing and seeding Winter wheat was slow to begin growing, and entered the dormant state in December rather small in size. The dry weather during November and December was especially favorable for gathering and cribbing corn, contributing largely to the excellent quality of this crop.

THE WEATHER BY MONTHS.

JANUARY.—The month began with a cold wave, but temperatures were near normal after the first week. Snowfall was light, and afforded but little protection to grain. Abnormally heavy precipitation resulted in serious floods in all streams of the State. and damaged roads to an unusual degree. The sleet and ice storms of the 21st-23d caused much damage to trees, telephone and telegraph lines in the northern counties.

FEBRUARY.—Except for two short periods of severe cold, temperatures were seasonal. Precipitation was light, and there was but little snow protection for winter grain. Considerable progress was made with plowing, seeding, and sowing tobacco plant beds.

MARCH.—Hard freezes during the first ten days caused further deterioration in grasses and winter grains. Abnormally high temperature during the last decade forced premature budding and blossoming of fruit trees. Heavy rains in the second decade prevented plowing and planting, and caused flood stages in the Ohio River and tributary streams. Destructive winds caused widespread damage on the 11th.

APRIL.—The month was unusually cold, windy, and unfavorable for spring work and plant growth. Except in 1907, this was the coldest April on record in this State during the past 31 years. Precipitation was abnormally heavy and unusually frequent, causing floods in the Ohio and other streams of the State and inundating low bottom lands which, in the western counties, remained flooded most of the month. Very little progress was made with plowing, corn planting, and gardening. Freezes during the first two weeks damaged pears and early peaches.

MAY.—The first three weeks were showery, cold, and decidedly unfavorable for outdoor work. Favorable weather prevailed during the last decade, but all seasonal activities were still far behind at the end of the month.

(Continued on next page.)

COMPARATIVE ANNUAL DATA FOR KENTUCKY.

Year.	Temperature.				Precipitation.	
	Mean.	*Departure	Highest	Lowest.	Average.	*Departure
1889	55.6	−0.7	101	3	35.97	− 9.16
1890	57.1	+0.8	101	4	58.82	+13.69
1891	56.3	0.0	105	0	49.69	+ 4.56
1892	55.3	−1.0	101	− 6	44.25	− 0.88
1893	55.5	−0.8	101	−22	44.71	− 0.42
1894	57.1	+0.8	105	−12	34.81	−10.32
1895	55.0	−1.3	104	−18	38.47	− 6.66
1896	57.6	+1.3	106	−12	44.68	− 0.45
1897	57.2	+0.9	107	−16	46.72	+ 1.59
1898	57.2	+0.9	103	−12	52.38	+ 7.25
1899	56.4	+0.1	105	−33	46.38	+ 1.25
1900	57.7	+1.4	104	− 9	44.40	− 0.73
1901	55.3	−1.0	112	−22	35.65	− 9.48
1902	56.5	+0.2	107	− 3	44.35	− 0.78
1903	55.8	−0.5	104	−16	41.16	− 3.97
1904	55.3	−1.0	100	− 9	35.10	−10.03
1905	55.8	−0.5	106	−16	47.68	+ 2.55
1906	57.0	+0.7	100	−12	48.84	+ 3.71
1907	56.1	−0.2	102	−11	47.76	+ 2.63
1908	57.7	+1.4	104	2	41.94	− 3.19
1909	56.5	+0.2	104	−14	51.36	+ 6.23
1910	55.3	−1.0	100	−20	50.67	+ 5.54
1911	58.0	+1.7	106	−16	46.77	+ 1.64
1912	54.6	−1.7	100	−20	47.93	+ 2.80
1913	57.9	+1.6	109	− 2	47.46	+ 2.33
1914	56.3	0.0	109	−16	41.80	− 3.33
1915	56.2	−0.1	102	0	51.92	+ 6.79
1916	56.2	−0.1	[illegible]	−14	45.49	+ 0.36
1917	53.5	−2.8	100	−21	46.01	+ 0.88
1918	56.5	+0.2	111	−20	40.64	4.49
1919	57.9	+1.6	104	− 1	52.13	+ 7.00
1920	55.5	−0.8	100	− 6	46.90	+ 1.77

*Compared with 30 years' normal.

Climatological Data for the Year 1920.

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).							Number of days				Prevailing direction of wind.
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.	Total snowfall, unmelted.	With precip. of .01 in. or more.	Clear.	Pt. Cloudy.	Cloudy.	
WESTERN DIVISION.																				
Beaver Dam	Ohio	441	17	57.3	97	July 24	6	Feb. 16†	17	40.81	6.32	Apr.	1.05	Oct.	5.1	104	207	79	80	sw.
Blandville	Ballard	445	39	57.2	96	July 4	8	Feb. 16	42	42 41	6.25	Jan.	0.92	Nov.	5.6	95	138	106	122	sw.
Calhoun	McLean	437	17	56.3	96	July 3	5	Feb. 16	18	48.99	6.44	Jan.	1.16	Oct.	8.3	106	127	135	104	sw.
Earlington	Hopkins	420	30	56.9	98	June 13†	6	Dec. 28	30	42.87	6.86	Jan.	1.30	Oct.	6.0	93	199	17	150	s.
Greenville	Muhlenburg	519	4	56.5	100	June 27	4	Mar. 1	4	47.64	7.96	Jan.	1.04	Oct.	......	108	150^{k}	136^{k}	69^{k}	w.
Henderson	Henderson	327	......	......	......	......	......	......	12	46.26	7.03	Mar.	0.89	Feb	5.5	92	......	......	......	......
Hopkinsville	Christian	524	24	58.1	98	June 14†	6	Feb. 16†	24	47.27	10.82	Jan.	0.40	Oct.	5.0	105	134	39	193	sw.
Marion	Crittenden	571	22	57.2	95	Aug. 6	7	Feb. 16	22	39.73	6.35	May	0.70	June	2.5	66	153	96	117	s.
Owensboro	Daviess	479	24	56.3	95	July 24	6	Feb. 16	24	39.75	4.89	Jan.	1.03	Feb.	4.5	110	158	63	143	s.
Paducah (Lone Oak)	McCracken	516	4	57.3	99	June 14†	8	Feb. 16	4	52.83	7.02	Dec.	1.14	Nov.	8.2	116	205	33	128	s.
Paducah	McCracken	341	......	......	......	......	......	......	32	48 59	6.12	Aug.	0.98	Nov.	2.0	90	......	......	......	......
CENTRAL DIVISION.																				
Anchorage	Jefferson	700	20	53.6	98	July 24	− 5	Jan. 5	20	43.95	5.81	Jan.	1.24	Feb.	10.9	102	184	61	121	sw.
Bardstown	Nelson	637	24	55.8	96	July 24	0	Jan. 5	24	43.98	7.06	Jan.	1.23	Oct.	13.6	101	229	42	95	e.
Bowling Green	Warren	500	30	58.0	98	June 15†	7	Jan. 3†	31	58.62	11.08	Jan.	1.75	Oct.	6.0	102	155	99	112	w.
Brownsville	Edmonson	410	......	......	......	......	......	......	3	55.93	10.45	Jan.	1.07	Oct.	9.5	136	......	......	......	......
Burnside	Pulaski	773	......	......	......	......	......	......	28	57.04	8.24	Jan.	0.85	Oct.	5.5	113	......	......	......	......
Carrollton	Carroll	492	......	......	......	......	......	......	21	41.52	8.12	April	1.21	Feb.	......	121	......	......	......	......
Cloverport	Breckenridge	375	......	......	......	......	......	......	7	49.01	7.17	April	1.08	Feb.	11.5	131	......	......	......	......
Eubank	Pulaski	1,177	26	54.4	91	June 15†	0	Feb. 16	26	49.92	7.63	Aug.	0.91	Oct.	11.5	98	108	93	165	sw.
Frankfort	Franklin	560	27	55.5	98	July 24	0	Jan. 5	31	42.95	8.16	April	1.25	Dec.	8.9	120	177	23	166	s.
Franklin	impson	691	25	57.4	98	July 5	7	Feb. 16	25	55.96	9.17	April	0.72	Oct.	6.5	102	178	74	114	s.
Greensburg	Green	581	28	54.8	93	July 24	3	Jan.	32	58.51	9.81	Jan.	2.17	Nov.	5.4	144	109	66	188	se.
High Bridge	Jessamine	762	......	......	......	......	......	......	18	48.93	8.03	Aug.	1.45	Nov.	8.5	113	......	......	......	......
Irvington	Breckinridge	646	23	55.8	95	July 24	5	Feb. 16	23	42.70	6.38	Jan.	1.13	Oct.	6.2	89	172	51	143	sw.
Junction City	Boyle	985	27	55.0	93	July 23	− 1	Mar. 8	27	57.21	9.35	April	2.32	Oct.	19.3	170	161	105	100	sw.
Leitchfield	Grayson	635	25	55.4	95	July 24	5	Feb. 16	25	44.76	7.43	Jan.	1.27	Oct.	7.6	93	155	109	102	sw.
Lexington	Fayette	989	33	54.1	93	July 24	2	Jan. 3†	33	43.00	6.71	Aug.	1.40	Dec.	14.1	133	121	85	160	sw.
LOUISVILLE	Jefferson	525	48	55.6	95	July 24	4	Feb. 16	48	36.15	5.49	Mar.	0.79	Feb.	11.0	108	145	87	134	s.
Do (Cherokee Park)	Jefferson	534	11	54.8	93	July 24	− 1	Jan. 5	11	38.42	6.22	Mar.	1.15	Feb.	9.4	108	154	94	118	s.
St. John	Hardin	777	24	55.0	98	July 24	3	Jan. 3	24	44.50	7.04	Aug.	1.51	June	11.0	100	216	43	107	......
Scott	Kenton	900	23	53.2	95	July 23	− 4	Jan. 3	23	41.61	6.49	Aug.	1.44	Dec.	16.1	115	105	128	133	s.
Shelbyville	Shelby	825	31	53.2	98	July 23	− 5	Jan. 5	32	40.06	6.14	Mar.	1.08	Oct.	14.9	108	149	91	126	s.
Taylorsville	Spencer	489	18	53.8	96	July 23†	− 3	Jan. 5	18	42.50	6.96	Jan.	0.73	Oct.	10.6	139	156	48	162	s.
Williamstown	Grant	943	18	54.3	95	July 23†	− 4	Jan. 3	18	42.54	8.46	Aug.	0.80	Feb.	17.7	116	129	112	125	......
Woodbury	Butler	533	......	......	......	......	......	......	3	53.23	10.96	Aug.	1.41	Oct.	4.5	121	......	......	......	......
EASTERN DIVISION.																				
Ashland	Boyd	534	......	......	......	......	......	......	4	37.21	5.98	April	1.06	Oct.	10.7	109	......	......	......	......
Beattyville	Lee	650	16	56.1	97	July 30	− 6	Jan. 5	18	43.93	8.41	Jan.	1.00	Oct.	12.1	138	109	94	163	w.
Berea	Madison	1,070	18	55.9	94	June 27†	− 4	Jan. 5	18	47.29	8.41	Jan.	1.05	Oct.	18.0	91	154	64	126	sw.
Cynthiana	Harrison	684	......	......	......	......	......	......	3	44.27	8.20	April	1.70	Feb.	7.0	91	......	......	......	......
Falmouth	Pendleton	600	......	......	......	......	......	......	32	48.07	9.67	Aug.	1.58	Feb.	......	106	157	66	143	s.
Farmers	Rowan	668	......	......	......	......	3	Feb. 27	14	46.36	6.52	April	1.30	Oct.	9.8	88	162	108	96	w.
London	Laurel	1190	......	......	......	......	......	......	6	50.09	8.76	Jan.	0.60	Oct.	12.0	118	......	......	......	......
Maysville	Mason	524	23	54.8	97	July 24	2	Jan. 3	15	54.57	7.92	July	1.85	Feb.	19.0	102	156	36	174	w.
Middlesboro	Bell	1,128	23	55.9	93	June 15	1	Jan. 5	23	61.06	8.00	Aug.	1.73	Oct.	13.0	123	187	130	49	......
Mount Sterling	Montgomery	930	31	54.0	94	July 24	− 2	Jan. 5	31	48.48	9.47	Aug.	1.74	Feb.	......	128	182	61	123	w.
Oliver	Greenup	540	......	......	......	......	......	......	1	40.48	6.39	April	1.07	Oct.	14.6	112	......	......	......	......
Pikeville	Pike	634	......	......	......	......	......	......	15	51.26	7.68	Jan.	1.48	Oct.	8.0	108	......	......	......	......
Richmond	Madison	926	26	56.2	93	June 15	0	Jan. 3†	28	49.40	7.70	Jan.	1.91	Oct.	10.1	124	165	36	165	......
Vanceburg	Lewis	525	......	......	......	......	......	......	4	46.39	7.99	April	1.48	Feb.	......	106	......	......	......	......
Williamsburg	Whitley	939	23	57.2	94	June 16†	1	Jan. 5	25	53.92	8.89	Aug.	0.58	Oct.	14.3	117	118	156	92	w.

All temperature data are taken from self-registering thermometers.
Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents 2 days, etc.
†Also on other dates

JUNE.—The month began with a few cool, rainy days that were favorable for transplanting tobacco. Weather suitable for cultivation of crops and for finishing planting prevailed during the rest of the month, becoming rather dry toward the close. Wheat improved constantly until harvest, which took place under ideal conditions and was followed almost immediately by threshing. The dry weather checked the growth of early potatoes, caused oats to head prematurely, and resulted in a poor stand of late set tobacco.

JULY.—The month was cool, and precipitation deficient in most localities. The low temperature was rather favorable than otherwise, enabling crops to better withstand the drought. Threshing was finished, and harvesting of hay and oats proceeded under favorable weather conditions. The lateness of the staple crops and their splendid state of cultivation were important factors in preventing serious injury by drought. Tobacco grew unevenly, however, and the development of corn was greatly delayed.

AUGUST.—Good general rains on the 6-8th broke the prevailing drought, and showers continued almost daily during the remainder of the month. Rapid growth followed the rains; pastures became luxuriant, and late potatoes presented the best prospect in many years. The moist weather caused some damage to tobacco in barns from "house-burn", in the burley district; and is believed to have promoted the spread of tobacco rust.

Monthly and Annual Precipitation for the Year 1920, with Departures from the Normal.

Stations	January		February		March		April		May		June		July.		August		September		October		November		December		Annual	
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure
WESTERN DIVISION.																										
Beaver Dam	3.60	−0.86	1.48	−1.90	3.39	−0.52	6.32	+2.21	6.10	+2.32	1.81	−1.62	3.03	−1.36	5.45	+2.11	4.86	+2.34	1.05	−1.39	1.15	−1.71	2.57	[illegible]	[illegible]	1.76
Blandville	6.25	+1.62	[illegible]	−2.08	4.43	−0.20	3.75	−0.78	5.25	+1.01	3.42	−0.94	4.10	+0.21	2.59	−0.55	1.74	−1.41	1.97	−1.03	0.92	−3.15	5.54	+1.61	[illegible]	[illegible]
Calhoun	6.44	+1.35	1.98	−1.42	5.85	+1.88	6.27	+1.79	6.10	+2.49	3.34	−0.29	6.12	+1.53	4.57	+1.21	2.05	−0.55	1.16	−2.12	1.94	−1.17	3.17	−1.60	[illegible]	3.70
Earlington	6.86	+2.38	1.69	−1.91	3.97	−0.91	6.17	+1.80	5.58	+0.87	2.30	−1.13	3.53	−0.57	3.68	+0.53	2.96	+0.27	1.30	−1.27	1.55	−2.19	3.28	[illegible]	42.87	[illegible]
Greenville	7.96	...	2.25	...	3.96	...	6.96	...	4.70	...	2.20	...	5.20	...	5.50		2.29	...	1.04	...	1.06	...	[illegible]		47.64	
Henderson	3.81	+0.11	0.89	−1.86	7.03	+2.25	3.65	+0.22	6.56	+2.70	4.98	+0.75	4.04	+0.28	3.20	+0.90	3.24	+0.69	2.38	−0.72	[illegible]	[illegible]	5.10	[illegible]	[illegible]	[illegible]
Hopkinsville	10.82	+5.69	2.59	−1.30	4.85	+0.01	5.35	+1.00	4.17	−0.06	5.16	+0.88	1.80	−2.23	5.04	+1.99	1.60	−1.43	0.40	−2.47	1.81	−2.34	[illegible]	−1.09	[illegible]	[illegible]
Marion	5.60	+0.80	1.48	−1.89	5.29	+0.50	3.47	−1.11	6.35	+2.06	0.70	−2.95	3.23	−0.70	3.46	+0.67	2.05	−0.99	2.18	−0.36	1.23	−2.49	4.69	+0.47	[illegible]	[illegible]
Mayfield	...	...	2.33	−1.50	...	...	5.72	+1.58	4.90	+0.55	2.55	−0.05	4.77	0.12	3.04	−0.20	...	...	0.15	[illegible]	1.41	−2.79	4.27	[illegible]		
Owensboro	4.89	0.38	1.03	−2.22	5.76	+0.98	4.11	+0.01	3.83	−0.01	3.30	−0.27	3.94	+0.09	2.95	−0.64	3.55	+0.73	1.88	−0.22	2.16	−1.29	2.35	−1.51	39.75	[illegible]
Paducah (Lone Oak)	6.38	...	2.72	...	4.99	...	5.26	...	5.00	...	2.51	...	4.15	...	4.64	...	5.02	...	1.66	...	1.14	...	7.62		52.83	
Paducah	5.84	+1.21	2.22	−1.39	4.72	+0.33	4.76	+0.43	5.23	+1.42	2.18	−2.34	4.16	+0.18	6.12	+2.84	3.72	+0.78	2.92	−0.24	0.98	−2.82	5.74	+1.98	48.59	[illegible]
Princeton	...		...	...	...	...	4.84	+1.27	7.24	+2.01	1.01	−3.08	4.90	+1.49	3.67	+0.15	1.10	−1.64	1.94	−0.16	1.64	−2.48	3.98	−0.46	...	
Russellville	11.43	+5.74	2.50	−1.14	4.42	−0.87	7.95	+2.92	3.45	−1.07	1.89	−1.25	3.20	−1.81	...	...	...	...	...	...	...	...	...	...	...	...
CENTRAL DIVISION.																										
Alpha	8.00	+3.15	...	...	...	...	...	...	...	...	...	...	4.09	1.61	6.88	+2.55	3.29	+0.13	...	...	2.78	0.95	2.91	−1.83	...	...
Anchorage	5.81	+1.73	1.24	−1.90	5.59	+1.35	5.10	+1.10	3.31	−0.53	1.85	−1.78	2.34	−2.10	8.88	+4.99	1.95	−0.71	2.80	−0.25	3.56	+0.61	1.52	−2.46	[illegible]	+0.05
Bardstown	7.36	+2.53	3.18	−0.73	5.52	+0.83	5.55	+1.68	3.92	+0.39	2.59	1.75	2.97	−1.51	5.99	+2.38	2.55	0.35	1.23	−1.17	1.68	−1.70	1.44	−2.92	43.98	−2.32
Bowling Green	11.08	+6.44	2.85	−1.82	4.69	+0.23	7.48	+3.22	6.74	+2.49	2.40	−1.47	6.71	+2.25	4.08	+0.56	4.64	+1.51	1.75	−0.62	1.90	−1.71	4.30	−0.02	58.62	+10.60
Brownsville	10.45	...	2.71	...	4.78	...	8.07	...	5.01	...	2.82	...	3.05	...	7.18	...	5.75	...	1.07	...	1.78	...	3.26	...	55.93	...
Burnside	8.24	+3.69	4.80	+0.54	5.74	+0.48	5.56	+1.36	4.36	+0.29	4.95	+0.57	3.78	−1.15	5.92	+1.76	6.73	+3.47	0.85	2.18	2.43	0.78	3.68	0.61	57.04	+7.44
Camp Knox	...	...	...	...	...	...	5.33	...	2.92	...	1.72	...	2.93	...	5.92	...	...	...	2.21	...	2.50	...	2.44	...	...	...
Carrollton	4.26	−0.62	1.21	−1.67	5.03	+0.70	8.12	+4.94	3.67	−0.37	3.07	−0.52	2.04	−1.36	5.58	+2.76	2.53	−0.30	2.04	−0.61	2.53	−0.40	1.44	−1.56	41.52	+3.23
Cloverport	5.31	...	1.03	...	6.81	...	7.17	...	5.42	...	1.76	...	5.17	...	4.18	...	3.85	...	2.58	...	2.38	...	3.05	...	49.01	...
Eubank	7.14	+3.47	3.73	−0.36	3.50	−1.75	7.24	+3.19	5.04	+1.09	3.14	−0.94	4.13	−0.50	7.63	+3.68	2.58	+0.06	0.91	−1.23	2.06	−0.97	2.52	−0.90	49.92	+3.84
Frankfort	6.36	+2.23	1.84	−1.72	5.33	+0.63	8.16	+4.43	2.78	−1.03	3.41	−0.79	1.85	−2.26	4.75	+1.07	3.89	+1.03	1.63	−0.84	1.70	−1.71	1.25	−2.34	42.95	−1.30
Franklin	7.71	+4.11	4.92	+0.03	5.48	+0.73	9.17	+4.56	3.76	−0.29	3.10	−0.87	4.03	−0.08	9.45	+6.15	1.79	−1.57	0.72	−1.38	2.53	−1.00	3.30	−0.98	55.96	+9.41
Greensburg	9.81	+5.30	3.38	−0.64	4.36	−0.67	8.44	+4.59	4.27	−0.02	2.69	−1.76	3.47	−1.12	8.19	+4.29	5.90	+2.84	2.53	−0.23	2.17	−1.24	3.30	−0.86	58.51	+10.48
High Bridge	7.53	+3.29	2.62	−0.84	4.00	−0.21	6.83	+3.14	3.62	−0.20	2.66	−1.33	3.45	−1.07	8.63	+4.16	4.23	+1.35	2.44	−0.03	1.45	−1.26	2.07	−2.33	48.93	+4.67
Irvington	6.38	+1.96	1.21	−2.12	6.07	+1.47	6.01	+1.99	3.40	−0.01	1.43	−2.56	5.07	−1.52	3.90	+0.30	3.27	+0.28	1.13	−1.62	2.60	−0.61	2.23	−1.67	42.70	−1.10
Junction City	8.82	+4.40	4.07	+0.44	5.18	+0.07	9.35	+5.64	5.36	+1.61	3.27	−0.55	3.95	−0.28	5.99	+2.86	2.93	−0.09	2.32	+0.33	2.33	−0.81	3.64	−0.59	57.21	+13.03
Leitchfield	7.43	+2.91	2.11	−1.67	4.98	+0.19	5.81	+1.73	3.70	+0.30	1.87	−2.12	5.03	+0.89	4.94	+1.27	3.52	+0.12	1.27	−1.16	1.87	−2.06	2.23	2.39	44.76	−2.83
Lexington	5.26	+1.43	2.11	−1.23	4.62	−0.10	6.42	+3.08	2.51	−1.01	2.39	−1.60	1.73	2.71	6.71	+3.14	4.88	+2.46	2.75	+0.53	2.22	−1.26	1.40	−1.92	[illegible]	+0.81
LOUISVILLE	4.77	+0.87	0.79	−3.05	5.49	+1.17	5.16	+1.09	2.53	−1.11	1.72	−2.51	2.13	−1.61	4.78	+1.27	1.79	−0.84	1.55	−1.08	3.35	−0.83	2.09	−1.64	36.15	−8.27
Do (Cherokee Park)	4.96	+0.18	1.15	−1.81	6.22	+2.38	4.77	+0.49	3.04	−0.84	1.45	−2.11	2.02	3.60	5.57	+1.42	2.17	−1.00	1.76	−1.66	3.20	+0.77	2.11	−2.06	38.42	−7.84
St. John	6.88	+2.31	2.24	−1.74	4.90	−0.09	5.70	+1.83	4.52	+0.54	1.51	−2.49	3.17	−0.38	7.04	+3.41	2.83	−0.29	1.56	−0.93	1.89	−1.59	2.26	−2.16	44.50	−1.58
Scott	3.42	+0.67	1.81	−0.94	4.43	−0.01	6.05	+2.87	5.55	+1.49	2.96	−0.72	2.76	−0.58	6.49	+2.95	2.26	0.29	1.77	−0.57	2.67	−0.13	1.44	−1.77	41.61	+1.63
Shelbyville	5.82	+1.56	1.43	−2.37	6.14	+1.43	5.98	+2.26	2.15	−1.97	4.07	−0.39	1.95	−2.15	5.52	+2.16	2.10	−0.75	1.08	−1.34	2.66	0.75	1.16	−2.73	40.06	−5.04
Taylorsville	6.96	+2.27	2.03	−1.74	5.97	+1.63	6.10	+1.63	2.31	−1.16	4.39	−0.14	2.02	−2.62	5.31	+1.59	2.90	−0.55	0.73	−1.82	1.94	−1.16	1.84	−2.58	42.50	−4.65
Williamstown	3.01	−0.86	0.80	−2.17	4.43	+0.27	6.21	+3.11	3.66	+0.11	4.71	+0.98	2.38	−1.68	8.46	+4.32	2.97	−0.12	2.27	−0.61	2.18	−0.16	1.46	−2.14	42.54	+1.05
Woodbury	9.35	...	2.31	...	3.53	...	6.66	...	4.69	...	2.08	...	3.91	...	10.96	...	3.79	...	1.41	...	1.46	...	3.05	...	53.23	...
EASTERN DIVISION.																										
Ages	...	...	...	...	5.06	...	5.49	...	2.60	...	5.09	...	5.16	...	8.52	...	3.36	...	1.93	...	3.83	...	4.61	...	...	...
Ashland	5.51	...	1.83	...	3.52	...	5.98	...	2.25	...	3.02	...	4.34	...	2.79	...	2.94	...	1.06	...	2.14	...	1.83	...	37.21	...
Beattyville	8.41	+3.75	2.43	−1.67	3.83	−1.50	4.17	−0.10	2.60	−1.55	4.12	−0.59	3.54	−1.49	4.83	+0.20	3.59	+0.54	1.00	−2.16	3.16	+0.41	2.25	−2.42	43.93	−6.58
Berea	8.41	+3.88	2.99	−0.18	3.83	−0.93	6.71	+3.02	4.42	+0.36	3.14	−1.41	2.61	−1.98	4.21	−0.73	4.45	+1.79	1.05	−2.02	2.70	−0.20	2.77	−1.82	47.29	−0.22
Cynthiana	5.20	...	1.70	...	5.42	...	8.20	...	2.65	...	3.30	...	2.10	...	7.05	...	2.30	...	2.40	...	1.80	...	2.15	...	44.27	...
Falmouth	5.19	+1.49	1.58	−1.78	5.44	+1.35	5.68	+2.21	4.96	+1.29	3.15	−1.02	3.34	−0.41	9.67	+6.14	3.24	+0.78	2.24	−0.20	1.73	−1.44	1.85	−1.50	48.07	+6.91
Farmers	6.20	+1.78	1.91	−1.09	4.36	−0.15	6.52	+2.52	2.87	−1.19	4.94	+0.40	6.28	+0.98	5.75	+1.18	2.45	−0.49	1.30	−2.00	1.70	−1.13	2.08	−1.67	46.36	−0.86
Harlan	5.82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jackson	7.89	+4.13	0.79	−2.51	3.15	−1.48	3.40	−0.12	2.56	−1.16	5.13	+1.13	4.92	+0.89	...	...	3.20	−0.62	1.50	−2.09	2.77	+0.09	3.55	−0.05	...	...
London	8.76	...	3.91	...	4.24	...	5.66	...	5.03	...	4.25	...	5.03	...	4.62	...	3.19	...	0.60	...	2.18	...	2.62	...	50.09	...
Louisa	7.05	+3.45	1.99	−1.69	3.29	−0.83	4.58	+1.36	3.07	−1.15	...	...	2.94	−0.42	2.80	−1.03	2.31	−0.26	0.76	−2.12	2.45	−0.30	2.43	−0.73	...	...
Maysville	5.77	+1.61	1.85	−1.48	4.97	+0.33	7.78	+4.35	5.13	+1.08	2.94	−1.39	7.92	+3.38	6.95	+2.97	5.14	+2.51	2.13	−0.39	2.10	−0.74	1.89	−1.87	54.57	+10.36
Middlesboro	6.33	+1.65	4.43	−0.49	7.40	+1.92	6.15	+1.36	2.03	−2.18	6.32	+1.78	4.88	−0.62	8.00	+4.47	4.01	+1.26	1.73	−0.57	4.63	+1.12	5.15	+1.00	61.06	+10.70
Mount Sterling	5.45	−0.73	1.74	−2.25	5.07	−0.34	7.87	+3.95	2.39	−1.90	1.99	3.14	3.97	−1.09	9.47	+5.50	3.71	+0.77	2.09	−0.88	2.46	−0.78	2.27	−1.97	48.48	−1.40
Oliver	5.03	...	2.60	...	3.71	...	6.39	...	2.54	...	5.91	...	5.29	...	1.79	...	1.69	...	1.07	...	2.69	...	1.77	...	40.48	...
Pikeville	7.68	+3.64	3.00	−0.28	4.26	−0.29	5.38	+1.77	3.90	+0.75	6.06	+1.57	3.82	−0.17	5.24	+1.10	3.02	+0.05	1.48	−1.54	4.10	+1.43	3.32	−0.55	51.26	+7.48
Richmond	7.70	+3.63	2.42	−1.02	3.76	−0.53	6.49	+2.88	3.64	+0.06	2.93	−1.01	5.47	+1.60	6.23	+3.03	3.97	+1.13	1.91	−0.90	2.58	−0.29	2.30	−1.65	49.40	+6.83
Vanceburg	5.02	...	1.48	...	4.74	...	7.99	...	3.65	...	3.01	...	5.81	...	5.31	...	3.47	...	2.16	...	2.01	...	1.74	...	46.39	...
Williamsburg	7.74	+3.71	4.74	1.25	4.18	−0.74	5.71	+1.31	3.50	+0.58	4.27	−0.28	2.53	−3.34	8.89	+4.37	5.20	+1.84	0.58	−1.97	2.85	−0.08	3.73	+0.04	53.92	−5.53

The departures from normal precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

T. Precipitation is less than 0.01 inch rain or melted snow.

SEPTEMBER.—Showery weather continued during the first half of the month, interfering greatly with cutting, housing, and curing tobacco. It also delayed ripening of late crops; but the favorable weather that followed during the last two weeks in a large measure offset this delay.

OCTOBER.—Exceptionally fine weather prevailed until the 25th, favorable for saving the crops and for maturing late potatoes. Near the middle of the month the soil became too dry to be worked or seeded satisfactorily, occasioning delay in sowing wheat. Killing frost occurred in most localities on the 29th, and generally over the State on the 30th.

NOVEMBER.—The month was cold and dry, retarding growth of fall grains and germination of the late sown wheat. Rains late in the month supplied the needed soil moisture in most districts, but streams continued low and stock water short in many localities.

DECEMBER.—The first half of the month was warm, the last half cold, and precipitation light, conditions being favorable for the completion of corn gathering. Wheat grew to some extent during the first two weeks, and suffered little injury during the severe cold of the last half of the month because of the comparative dryness of the soil.

Monthly and Annual Mean Temperatures for the Year 1920, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September		October.		November.		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
WESTERN DIVISION.																										
Beaver Dam	34.4	- 0.2	36.8	+ 1.6	47.8	+ 1.1	55.0	-0.4	66.6	+ 0.7	72.7	- 0.9	76.4	- 1.2	74.6	- 1.6	72.5	+ 1.9	63.2	+ 5.8	47.8	+ 1.5	40.2	+ 4.6	57.3	+ 1.0
Blandville	33.4	0.0	38.2	+ 1.8	47.3	+ 0.2	54.9	-2.3	66.8	+ 0.3	73.3	- 1.6	77.8	- 0.1	74.4	- 2.4	71.8	+ 0.8	62.8	+ 4.7	45.0	- 1.6	40.2	+ 3.4	57.2	+ 0.3
Calhoun	32.9	- 3.4	36.7	- 0.6	46.9	- 2.4	54.2	-3.8	65.0	- 2.4	72.5	- 2.5	76.2	- 1.6	74.0	- 3.5	71.6	- 0.6	62.3	+ 3.0	44.6	- 3.8	38.8	+ 1.4	56.3	- 1.7
Earlington	34.4	- 0.9	37.8	+ 1.5	b47.4	+ 0.1	54.6	- 2.7	66.2	- 1.0	73.2	- 2.5	77.0	- 1.4	74.3	- 2.8	71.6	+ 0.5	61.9	+ 2.6	45.1	- 2.8	39.4	+ 1.3	56.9	- 0.7
Greenville	34.8	.....	37.4	.....	47.0	.....	54.8	.....	a65.3	.....	b72.2	.....	c75.8	.....	c73.9	.....	71.3	.....	b61.4	.....	45.3	.....	a39.3	.....	56.5	.....
Hopkinsville	36.2	- 1.8	39.2	+ 2.2	a47.2	- 2.0	55.2	- 1.6	67.3	- 0.3	73.6	- 1.6	77.8	- 1.0	76.2	- 1.6	74.3	+ 2.4	63.4	+ 3.0	46.6	- 1.7	40.2	+ 2.4	58.1	- 0.1
Marion	35.5	- 2.5	37.1	+ 1.4	47.3	- 1.3	55.1	- 2.2	65.6	- 1.5	73.2	- 1.7	77.0	- 0.8	74.4	- 3.7	72.7	+ 0.5	64.8	+ 5.4	45.7	- 2.6	39.4	+ 1.9	57.2	- 0.2
Mayfield	.....	.....	37.6	+ 0.4	.....	.....	53.6	- 3.6	66.0	- 0.2	72.1	- 1.5	a76.8	- 0.8	a74.4	- 2.9	.....	.....	.....	.....	.....	.....	40.0	+ 1.5	.....	.....
Owensboro	31.9	- 3.6	36.6	+ 1.9	47.2	+ 0.3	53.8	- 1.4	65.4	- 0.9	73.0	- 1.1	75.7	- 2.3	74.6	- 1.8	71.0	+ 0.3	62.6	+ 3.6	44.7	- 2.8	39.2	+ 2.6	56.3	- 0.4
Paducah (Lone Oak)	32.6	.....	36.2	.....	47.0	.....	53.6	.....	64.7	.....	74.4	.....	80.2	.....	77.2	.....	75.6	.....	63.8	.....	43.8	.....	38.6	.....	57.3	.....
Princeton	f32.0	- 3.4	.....	.....	.....	.....	55.4	- 2.8	66.1	- 1.4	72.7	- 3.3	76.8	- 1.8	b75.0	- 3.6	72.9	+ 1.5	62.6	+ 3.8	45.8	- 0.9	40.5	+ 2.8	.....	.....
Russellville	34.0	- 1.3	36.4	- 0.2	a45.9	- 3.3	53.4	- 4.4	65.3	.....	72.0	.....	f77.1	- 0.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CENTRAL DIVISION.																										
Alpha	38.6	- 1.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anchorage	29.4	- 3.6	32.8	+ 0.7	44.4	- 0.7	a49.8	- 3.4	62.2	- 1.9	70.6	- 1.3	74.2	- 1.8	72.2	- 2.5	69.4	+ 0.9	59.8	+ 3.0	42.8	- 1.5	36.0	+ 2.4	53.6	- 0.8
Bardstown	33.3	- 2.6	36.2	+ 1.7	47.6	+ 1.0	53.5	- 1.8	64.2	- 2.8	72.1	- 2.5	75.1	- 3.4	73.4	- 2.8	70.3	- 1.6	60.2	+ 0.7	44.8	- 2.2	38.4	+ 2.7	55.8	- 0.2
Bowling Green	37.0	+ 0.4	39.2	+ 1.6	47.4	- 0.9	56.3	- 1.8	66.6	- 1.0	74.8	- 1.0	77.6	- 1.3	74.5	- 3.8	72.9	+ 1.2	62.4	+ 3.2	47.6	+ 0.3	40.0	+ 2.4	58.0	- 0.1
Camp Knox	.....	.....	.....	.....	.....	.....	50.6	.....	63.8	.....	71.2	.....	74.8	.....	73.0	.....	.....	.....	61.6	.....	43.7	.....	37.6	.....	.....	.....
Eubank	34.0	- 0.9	35.4	+ 2.1	b44.4	- 1.9	52.6	- 1.2	62.2	- 2.0	70.1	- 1.0	72.4	- 2.3	72.0	- 1.8	69.2	+ 0.5	58.2	+ 1.5	44.2	- 0.3	37.9	+ 2.2	54.4	- 0.4
Frankfort	32.4	- 3.8	35.4	+ 0.6	46.3	+ 0.1	53.2	- 2.1	64.0	- 0.9	72.0	- 1.3	75.2	- 1.7	73.4	- 1.6	70.2	+ 1.7	60.0	+ 3.5	44.8	- 1.4	38.6	+ 1.3	55.5	- 0.4
Franklin	37.0	- 0.6	38.4	- 0.2	48.3	- 1.8	55.7	- 3.4	65.8	- 1.2	71.6	- 3.3	73.6	- 3.9	72.2	- 5.0	72.9	+ 0.9	64.0	+ 4.7	47.7	- 0.8	42.0	+ 2.0	57.4	- 1.1
Greensburg	34.6	+ 0.4	36.4	+ 2.7	46.2	- 0.6	53.8	- 1.2	63.0	- 1.9	c69.0	- 4.5	73.0	- 3.4	71.6	- 4.0	68.5	- 1.5	59.8	+ 3.3	43.0	- 1.7	38.6	+ 2.6	54.8	- 0.8
Irvington	32.6	- 3.6	35.6	+ 1.3	47.4	+ 0.6	53.1	- 2.4	64.6	- 1.7	72.0	- 1.7	75.0	- 2.4	73.6	- 2.4	70.8	+ 0.4	61.8	+ 6.2	44.8	- 1.9	38.8	+ 2.8	55.8	- 0.4
Junction City	34.0	- 0.6	35.6	+ 2.5	45.1	- 1.0	52.8	- 1.7	63.0	- 1.5	70.9	- 0.7	73.6	- 1.4	72.2	- 2.1	69.5	- 0.1	58.9	+ 1.4	44.6	+ 2.0	39.2	+ 3.9	55.0	+ 0.1
Leitchfield	33.0	- 2.1	35.2	+ 1.2	46.3	+ 0.3	53.2	- 2.2	64.7	- 0.8	g71.2	- 1.7	74.6	- 2.0	73.3	- 2.1	70.4	+ 0.6	60.3	+ 2.2	44.7	- 1.6	38.5	+ 2.7	55.4	- 0.5
Lexington	30.1	- 2.9	32.6	- 3.1	44.7	+ 1.3	49.7	- 4.0	62.4	- 1.9	71.3	- 1.9	74.4	- 2.2	72.2	- 2.4	69.9	+ 2.0	62.1	+ 5.6	43.3	- 1.4	36.2	- 0.2	54.1	- 0.9
LOUISVILLE	30.5	- 3.8	34.2	- 2.6	46.6	+ 1.3	51.2	- 5.0	64.7	- 2.0	72.8	- 2.2	76.2	- 2.4	73.6	- 2.9	71.3	+ 1.4	63.0	+ 4.6	44.8	- 1.5	38.1	0.0	55.6	- 1.2
Do (Cherokee Park)	31.3	- 3.3	34.6	- 0.6	46.7	+ 1.4	52.9	- 3.0	63.0	- 2.7	70.8	- 2.2	73.7	- 2.8	72.0	- 3.3	69.2	+ 1.2	60.2	+ 3.0	44.8	- 1.8	38.0	+ 3.1	54.8	- 0.9
St. John	32.4	- 1.7	35.6	+ 2.6	44.8	- 0.3	52.0	- 2.4	63.2	- 1.5	71.8	- 0.5	75.0	- 0.7	73.0	- 1.7	70.6	+ 1.5	60.2	+ 2.6	43.7	- 1.7	37.6	+ 3.0	55.0	- 0.1
Scott	27.8	- 5.3	31.4	+ 0.7	44.8	+ 1.4	49.0	- 4.1	61.2	- 2.6	70.1	- 1.5	73.0	- 3.6	71.5	- 3.6	68.6	- 0.9	61.0	+ 3.2	43.6	- 1.4	36.4	+ 3.2	53.2	- 1.2
Shelbyville	29.3	- 4.0	32.7	- 1.1	42.0	- 2.7	49.4	- 5.3	61.0	- 4.0	69.4	- 4.1	72.6	- 4.3	72.3	- 3.2	69.8	+ 0.6	61.2	+ 4.5	42.8	- 1.6	35.3	+ 0.3	53.2	- 2.0
Taylorsville	31.2	- 3.9	34.0	- 0.4	44.9	- 0.9	51.4	- 3.0	62.2	- 2.3	70.6	- 1.7	73.6	- 2.7	71.6	- 2.8	68.2	0.0	57.8	+ 1.8	43.0	- 1.9	37.3	+ 2.2	53.8	- 1.3
Williamstown	31.2	- 1.5	33.8	+ 2.8	46.2	+ 3.0	51.0	- 1.3	63.4	+ 0.3	71.4	+ 0.8	73.8	- 1.8	71.8	- 2.0	68.6	+ 0.2	60.9	+ 3.9	43.2	- 1.9	36.2	+ 3.3	54.3	+ 0.5
EASTERN DIVISION.																										
Ages	.....	.....	.....	.....	b47.0	.....	a55.4	.....	a64.2	.....	a72.1	.....	76.0	.....	73.7	.....	b71.6	.....	56.0	.....	b43.8	.....	39.1	.....	.....	.....
Ashland	.....	.....	35.4	.....	46.4	.....	53.2	.....	62.6	.....	72.2	.....	73.4	.....	74.0	.....	70.8	.....	60.8	.....	45.4	.....	39.4	.....	.....	.....
Beattyville	35.3	+ 1.3	36.8	+ 2.3	45.1	+ 0.4	54.1	+ 0.2	63.4	- 0.8	72.1	+ 0.1	74.8	- 0.6	74.3	- 0.9	71.4	+ 2.3	61.0	+ 3.9	45.4	- 1.3	39.2	+ 4.1	56.1	+ 1.3
Berea	33.8	- 3.5	35.2	- 0.6	46.7	- 0.4	a54.0	- 1.3	62.2	- 3.6	c73.5	+ 1.0	c73.8	- 2.3	b72.8	- 1.8	d71.8	+ 2.5	a61.8	+ 3.3	45.5	- 1.7	39.4	+ 2.7	55.9	- 0.5
Farmers	32.5	- 2.3	33.1	- 2.5	46.2	+ 1.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55.3	- 1.3	.....	.....	36.8	+ 1.7	.....	.....
Harlan	b38.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maysville	31.5	- 1.6	34.2	+ 1.2	46.6	+ 2.5	52.1	- 1.5	63.2	- 1.9	72.0	- 0.9	74.1	- 2.9	72.9	- 2.8	69.4	- 0.2	59.2	+ 2.1	43.8	- 0.8	38.0	+ 4.2	54.8	- 0.2
Middlesboro	36.8	- 1.0	37.3	- 1.6	46.4	- 2.1	56.0	- 0.2	63.9	- 0.8	71.6	- 0.6	74.3	- 0.4	72.2	- 2.2	69.9	+ 1.1	59.0	+ 1.8	43.8	- 2.0	40.0	+ 2.1	55.9	- 0.5
Mount Sterling	31.2	- 2.4	32.8	- 0.6	45.4	+ 1.7	51.4	- 2.2	62.0	- 2.1	71.0	- 1.4	73.6	- 2.2	72.4	- 1.7	68.4	+ 0.8	59.1	+ 3.5	43.4	- 0.6	37.0	+ 2.1	54.0	- 0.4
Richmond	32.8	- 0.9	34.6	- 0.7	47.2	+ 1.8	53.6	- 1.9	64.8	- 0.7	72.4	- 1.0	74.8	- 2.1	73.6	- 2.0	71.8	+ 1.3	63.4	+ 5.0	46.6	- 0.2	39.4	+ 2.3	56.2	0.0
Williamsburg	38.6	0.0	38.2	- 0.7	48.2	+ 2.1	56.8	+ 1.1	65.0	- 1.3	72.4	- 1.1	75.4	- 1.4	72.6	- 3.5	71.4	+ 0.8	60.7	+ 1.2	45.4	- 1.7	41.2	+ 2.9	57.2	0.0

All temperature data are taken from self-registering thermometers.

The departures from normal temperature are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

Reference letters, a, b, c, appearing in the table indicate number of days missing; for example, b represents two days, etc.

KILLING FROSTS, 1920.

STATIONS.	Last in Spring.	First in Autumn.	STATIONS.	Last in Spring.	First in Autumn
WESTERN DIVISON			Irvington	April 14	Oct. 29
Beaver Dam	April 14	Oct. 29	Junction City	do 14	do 29
Blandville	do 14	do 29	Leitchfield	do 14	do 29
Calhoun	do 14	do 29	Lexington	do 13	do 29
Earlington	do 14	do 29	Louisville	do 14	do 30
Greenville	do 14	do 29	Cherokee Park	do 14	do 30
Hopkinsville	do 14	do 29	St. John	do 14	do 29
Marion	do 14	do 29	Scott	do 14	do 29
Mayfield	do 14	do 29	Shelbyville	do 14	do 29
Owensboro	do 14	do 29	Taylorsville	do 14	do 29
Paducah	do 14	do 29	Williamstown	do 14	do 29
Princeton	do 14	do 29			
Russellville	do 14	do 29	EASTERN DIVISON		
			Ages	April 15	Oct. 30
CENTRAL DIVISON			Ashland	do 15	do 30
Alpha	....	....	Beattyville	do 14	do 30
Anchorage	April 14	Oct. 29	Berea	do 14	do 29
Bardstown	do 14	do 29	Farmers	....	do 29
Bowling Green	do 14	do 29	Maysville	do 14	do 29
Eubank	do 14	do 30	Middlesboro	do 15	do 30
Frankfort	do 14	do 29	Mount Sterling	do 14	do 29
Franklin	do 14	do 29	Richmond	do 14	do 29
Greensburg	do 14	do 30	Williamsburg	do 15	do 30

MONTHLY SUMMARIES, 1920.

MONTH.	Temperature.				Precipitation.		Average number of days.			
	State average.	*Departure.	Highest.	Lowest.	State average.	*Departure.	With .01 or more rain.	Clear.	Partly cloudy.	Cloudy.
January	33.4	- 1.8	72	- 6	6.75	+ 2.36	10	10	6	15
February	35.7	+ 0.1	71	0	2.27	- 1.33	9	8	5	16
March	46.3	+ 0.3	88	- 1	4.85	+ 0.19	10	15	6	10
April	50.8	- 5.1	89	22	6.16	+ 2.22	13	9	8	13
May	64.2	- 1.4	94	32	4.08	+ 0.13	11	13	7	11
June	71.9	- 1.8	100	44	3.12	- 1.06	7	17	6	7
July	75.2	- 1.5	99	44	3.83	- 0.47	9	16	9	6
August	73.4	- 2.3	98	43	5.80	+ 2.24	13	10	10	11
September	70.8	+ 0.8	96	38	3.30	+ 0.54	9	14	8	8
October	61.0	+ 3.2	93	24	1.64	- 0.86	4	21	5	5
November	44.7	- 1.4	79	10	2.21	- 1.14	8	12	5	13
December	38.6	+ 1.5	68	4	2.89	- 1.05	9	9	6	16
Annual means and extremes	55.5	- 0.8	100	- 6	46.90	+ 1.77	112	154	81	131

*Compared with 30 years' normal.

NOTE. Tables and charts giving climatic data for Kentucky in detail during 1920 have been published for each month at the Kentucky section center, Weather Bureau Office, Louisville, Ky., and can be obtained from the Official in Charge at that office. Indexes to special articles published during past years in Kentucky climatological reports will be found in the Monthly Report for June, 1909.

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